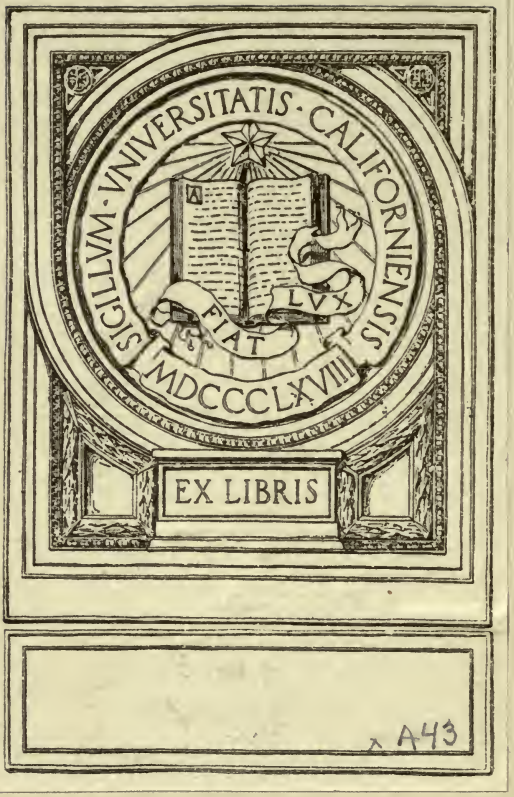
WOMEN IN THE BOOKBINDING TRADE

VAN KLEECK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RUSSELL SAGE
FOUNDATION

WOMEN IN THE BOOKBINDING TRADE

BY
MARY VAN KLEECK
SECRETARY COMMITTEE ON WOMEN'S WORK
RUSSELL SAGE FOUNDATION

INTRODUCTION
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NEW YORK
SURVEY ASSOCIATES, INC.
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INTRODUCTION

THE time has gone by when any large number of intelligent persons attempts to justify present conditions by urging that they are better than those of the past, or that, if we will only be patient, the "survival of the fittest," and the "elimination of the unfit," that are believed to be in progress, will make those of the future still better. However great our faith in the beneficence of the evolutionary process, we have learned that it can be both hastened in its operation and made more certain in its results by deliberate and purposeful human action. Through public sanitation and labor legislation the plane on which the struggle for existence is carried on may be raised to the advantage of all concerned. On the other hand, isolation of the insane, the feeble-minded, and other defectives may eliminate in one generation "unfit" lines of heredity which might otherwise be perpetuated indefinitely.

But to accomplish the task of improving social and industrial conditions by deliberate and purposeful action, we must first have knowledge of the conditions to be improved. This was the thought which caused editors of *Charities and the*

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Commons to organize and carry out and the Russell Sage Foundation to supply the funds for the epoch-making Pittsburgh Survey. It was the same thought which led the Foundation later to establish the Committee on Women's Work, with Miss Mary Van Kleeck as secretary. The first fruit of the patient and careful investigations which are being made by that Committee is the present volume.

There are several reasons why it is advantageous to study women in industry as though they constituted a distinct class and their problem was a distinct problem. In the first place, the proportion of women who enter gainful employments is constantly growing. This gives rise to special questions as to the effect of the increasing employment of girls and women on marriage and birth rates, the reaction of the employment of married women on the conditions of home life and particularly on the rearing of children, and the influence of the competition of women workers on the wages of men. We do not have similar problems for men because their gainful employment has long been an established fact to which our whole social life has become adjusted.

In the second place, there can be no doubt that the condition of women wage-earners is in many respects even less satisfactory than that of men. The range of skilled occupations open to them is smaller. Those who enter gainful employments as girls of from fourteen to eighteen,

may marry before they reach the age of twenty-five. With this possibility before them they have less incentive than boys to learn trades. The consequence of these two facts, re-enforced by the inferior strength of women, is that they are able to command wages which average only about one-half those that are paid to men. This means for most girls and women who have to be self-supporting a heart-breaking and health-destroying struggle. Underpay and its correlative overwork are the common lot. The easy escape from these hard conditions which prostitution appears to offer in a large city further differentiates her problem from that of her working brothers.

Finally, and as a consequence of these reasons, we have the putting forward of a protective program for women wage-earners which would seem to most people unnecessary, or at best premature, if proposed for men. Now that the Supreme Court of the United States has placed the stamp of its approval on this procedure by declaring that woman's "physical nature and the evil effects of overwork upon her and her future children justify legislation to protect her from the greed as well as the passion of men," the legislative treatment of women workers is likely for many years to come to be differentiated from that applied to men. The Russell Sage Foundation thus acted wisely when it decided to create a special department on Women's Work. By so doing it has prepared itself to attack one of the worst phases of

the labor problem—the phase, at the same time, in connection with which efforts toward a solution are most certain to command public, legislative, and judicial support.

The bookbinding trade was chosen first for study because it is one of the most important trades for women in New York City, and also in many respects a typical one. As Miss Van Kleeck explains, it affords employment to every grade of woman worker from the skilled craftsman who does artistic binding by hand to the machine operator, the hand folder, the wrapper, and the errand girl. The competition in it between outgoing hand processes and incoming machine processes is incessant. In some branches work is regular; in others it is highly irregular, overtime and free days occurring in the same week. Finally, there is a union in the trade to which some of the women employes belong; while most of the women are unorganized and little impressed by the advantages of organization. Bookbinding in New York City thus presents in miniature most of the important problems which confront women wage-earners.

The present report is the first of a series of studies which will serve to place before the people of the United States authoritative information in regard to the conditions under which women wage-earners carry on their work and the wages which they receive. Volumes treating of the Makers of

Artificial Flowers and of Women and Girls in the Public Evening Schools of New York City are nearly ready. As these are published readers will be able to get a comparative view of conditions in different trades, the lack of which inevitably weakens the force of the conclusions that may be drawn from the study of any single trade.

Knowledge of existing conditions is the necessary preliminary to a reform of those conditions; but it is the reform and not the knowledge that must ever be the chief concern of an organization like the Russell Sage Foundation. As the information contained in the Pittsburgh Survey gave a tremendous impetus to movements for civic and industrial betterment not only in that city but in the whole state of Pennsylvania, so the facts presented in this volume about women employed in bookbinderies should afford a basis for effective agitation for the reforms most urgently called for. Of these, none seem to stand out more clearly than an effective prohibition on the employment of women at night and the regulation of the employment of girls from fourteen to eighteen so that they will be enabled to learn the trade in which they are engaged and not be mere drifters, regular in nothing except in frequent changes from employer to employer and prolonged periods of unemployment, and certain of nothing except that their wages will never be sufficient to enable them to be adequately self-supporting.

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week reported their 'longest day's * labor' as 16¾, 20¼, 22½, and 24¼ hours. These 'long days' occurred once, and sometimes twice, a week for a period of 16 to 26 weeks, except in the case of the girl who worked 24¼ hours. Her usual long day was 20¼ hours, but she had worked 24¼ twice in 21 weeks." Two of these girls were not yet twenty-one years old.

It would appear, therefore, that in the twenty years intervening between these two official reports, the overtime work required of women in bookbinding had not been lessened. But now the public is beginning to display a keener interest in the conditions of employment of women, and a thorough investigation of a trade in which such flagrant instances of overwork are officially recorded should help to arouse the community to a fuller sense of its responsibility for the welfare of wage-earning girls. This volume is the result of such an investigation made by the Committee on Women's Work of the Russell Sage Foundation.

The significance of the investigation is increased by the varied aspects of the bookbinding industry, and by its concentration and importance in New York.† The United States census reports show that in 1900 more than 15,000 women were engaged in the bindery trade and its allied occupa-

* In binderies where such schedules of hours prevail, the phrase "long day" is commonly used to refer to the long periods of work.

† See Chapter I, p. 32.

tions throughout the country.* More than 26 per cent of these were employed in New York City. Except for the large groups of women in the garment industries—including dressmaking, seamstress work, tailoring, and millinery—bookbinding ranks second only to cigar making as a trade for women in this city. In no other trade in New York are the numbers of men and women so nearly equal. None illustrates better the survival of century old methods side by side with the newest inventions. None can show more strikingly the contrast between the artist craftsman and the worker who automatically repeats a single process, both of whom are called bookbinders. Few occupations reveal more clearly the effect of changing processes and changing machines. In none can more marked instances be found of unequal distribution of work through the hours of the day or the months of the year.

Bookbinding, however, is by no means the most undesirable of occupations for women. Its conditions are important not because they are unique but because they illustrate concretely problems common to many other industries. It is not in binderies alone that conditions change rapidly; that machines cause a reorganization of work and then give place to new inventions involving further reorganization; that speed is an essential requirement; that specialization is the custom, weakening

*Twelfth United States Census, 1900. Special Reports, Occupations, p. lii.

by continual repetition of one process that power of adjustment so vital to success in a changing industrial environment; that women work exhaustingly long hours in the busy season; that irregularity of employment during the dull season compels the worker to forego all or part of her wages, when even in the busy season the income of the majority of women employes is insufficient for self-support. Conditions like these would compel attention even if they occurred in but one occupation. When it is known that they affect the welfare of young girls and women in many different wage-earning pursuits, their importance is greatly increased. To analyze the facts about the bindery trade, to discover the constructive forces potent in the industry, to disclose opportunities for further improvements by employers, workers, and the community, and to make this knowledge common property should point the way toward changing the lot of women in many industries in which similar conditions exist.

Many books have been written on bookbinding as a craft, but not one has been found which contains facts regarding conditions of employment. The *International Bookbinder*, which describes itself as "a journal devoted to the interests of the bookbinders of the United States and Canada," is a chronicle of events in the workers' trade union. The United States census gives the numerical outlines of the industry, and contains some data about wages, regularity of employment, and nationality

and age of the workers, but the figures are confused by counting as bookbinding and blankbook making* several minor occupations, such as book stamping, chromo and show-card mounting, map publishing, line ruling, and the making of paper tablets, sample cards, and show cards, whose conditions do not resemble the real bindery trade. The reports of the New York State Department of Labor give the number of establishments in the state and city and their size, the number of men, women, and children employed, the normal hours of labor of the workers as a whole,† and the number and results of inspections and prosecutions.

Important as are these sources of information, the facts which they present are incomplete as a basis for a study of women workers. From them we learn nothing about the organization of the workroom force nor the processes carried on by women. They give no information about wages in relation to length of experience, about the methods of training workers, or about the previous schooling of the girls who enter the industry. They contain no facts about a girl's trade career, the necessity for frequent change from one shop to another, or from one occupation to another; the uncertainty of the seasons or the reasons for irregular employment. They do not show the home responsibilities of bindery girls nor their attitude toward their work. They do not give the facts about overtime.

* Twelfth United States Census, 1900. Manufactures, Vol. VII, p. 693. † Hours are not reported separately for women however.

They do not show differences as between establishments or between diverse branches of the trade. Thus, although the official figures throw light on the extent of the industry, its location, and certain of its external characteristics, nevertheless, to understand how women workers fare in this occupation, it was necessary to observe shop conditions at first hand, to interview employers, and to know a number of bindery women personally in their own homes.

The foundation of this report was the industrial history of 201 women workers in the trade, combined with data secured from all the binderies in Manhattan. The main subjects on which information was sought in the interviews with employers and workers were the processes of work done by women in the various branches of the trade, irregularity of employment, hours of work, the enforcement of factory laws, wages, home responsibilities, the activity of the trade union and the attitude of women workers and employers toward it, and the methods of teaching girls the trade. Three record cards,* 5x8 inches in size, were used in the field work, one for the record of a worker, one for the record of a workshop, and one for the worker's report of conditions in the shop in which she was employed.

A brief outline of the sources of names and addresses, and the methods of interviewing, is necessary to show how the detailed information asked for was secured. The field work was begun in co-

*See Appendix A, pp. 239–248, for outline of investigation, and facsimiles of cards.

operation with the Alliance Employment Bureau, a philanthropic agency, managed by representatives of social settlements and working girls' clubs, which undertakes to find employment for girls in trades and offices. The Bureau had from time to time received applications for work from women who had had experience in the bindery trade or who wished to learn it. On the other hand, it had frequently been asked by employers to supply them with bindery workers. It is the policy of this agency to investigate work-places before sending applicants to them, and the managers believed that a thorough study of binderies would yield the information needed to enable them to place girls in establishments where good conditions prevail. Thus, while the larger purpose of the investigation was to gather evidence regarding conditions in the industry as they affect women workers, the early part of the inquiry was designed to be of immediate use in the daily placement work of the Alliance Employment Bureau. This latter object afforded a reason for seeking interviews and enabled the investigators, in visiting both establishments and workers, to act as agents of the Bureau.

This preliminary, co-operative investigation was made between August 1, 1908, and August 1, 1909, while the Committee on Women's Work was a department of the Alliance Employment Bureau. The study was completed in the winter and spring of 1910–11, when employers representing some of the largest binderies in New York were again inter-

viewed by agents of the Committee, and more than 100 visits were made at the homes of bindery girls attending public evening schools in Manhattan and the Bronx. The field work lasted until July, 1911.

The first task was to secure the names and addresses of all binderies in Manhattan. A street directory in the form of a card index was compiled from as many sources as possible, including the business directories of New York City, the files of the Alliance Employment Bureau, the statements of bindery workers regarding their places of employment, and all advertisements for bindery women appearing in *The World* during a period of six months. It may be that a few binderies were omitted, but shops which did not appear in any of these sources could not have been important. The difficulty of securing a complete list of establishments in one trade even in a single borough of New York, is an evidence of the interlocking of occupations. Not all bookbinderies are independent. Bindery departments were discovered in lithographing establishments, in printing offices, in sample card manufactories, and even in so unexpected a place as a wholesale store, where the trade catalogue of the firm was bound on the premises. In this part of the investigation alone 478 visits were made at 417 addresses, with the result that 247 binderies or bindery departments employing a regular force of women were found, while 33 of the places visited were printing offices, or lithograph-

ing establishments, or other allied branches of the printing industry, in which bindery hands were employed only for temporary work. Some establishments had failed or had moved out of the borough of Manhattan, a few had consolidated with other firms, and in several no women were employed in binding processes. Of the 247 permanent binderies visited, 210 were investigated. Information about the others was incomplete.

The investigation of bindery establishments presented peculiar difficulties. To secure complete information from every employer interviewed was impossible. The obstacles were due not always to lack of interest on the part of the employer, or to a desire to conceal his "own business," but often to indefiniteness of conditions. Not all workshops are as carefully organized as the industrial ideal of the present century demands. "It depends on the orders," and "It all depends on the run of work," are replies recorded in answer to questions regarding wages, seasons, and other conditions. "How can I tell what kind of work's coming in?" said one employer impatiently when asked what branch of the trade was his specialty. Great differences in organization, found not only in different establishments, but in the same establishment from day to day, present many obstacles to the gathering of exact statistics. In many cases, however, employers gave very full information about the conditions of work of the women in their binderies. Their statements were verified and

supplemented by the case study of bindery girls. At the close of the investigation it was found that members of the group of girls interviewed had been employed at some time during their trade careers in over 50 per cent of the binderies investigated. This fact made it possible to determine the accuracy and value of statements made both by employers and by workers.*

The names of bindery girls were secured from the files of the Alliance Employment Bureau, from public evening schools, girls' clubs, and other organizations, and from women in the trade. The list numbered 362. To cover these cases it was necessary to make 732 visits. The number of complete records secured was 201.† The reasons for not securing full information from the others are various. Of the whole group, 61 girls had not

* Girls were interviewed who had worked in 36 of the 37 edition and pamphlet binderies in New York, employing 50 or more girls, in 56 of the 119 edition, pamphlet, job, and art binderies employing less than 50, and in 17 of the 54 blankbook binderies investigated. Of one bindery 21 present or former employes were interviewed, of another 19, another 18, and another 14. None were interviewed in the workroom.

† The sources of these 201 names were varied enough to inspire confidence in the representative character of the results.

Alliance Employment Bureau	86
Fellow workers in binderies	53
Evening schools	36
Settlements or girls' clubs, etc. (Includes Jacob A. Riis House, Richmond Hill House, Girls' Friendly Society, Educational Alliance, Greenpoint Settlement)	20
Visits to binderies	4
Manhattan Trade School	1
Advertisement	1
Total	201

been in the trade within the year preceding the date of the interview, and therefore their records were not tabulated; 13 gave incomplete or inaccurate information; 87 were not found, had never worked in the trade, had definitely left it, or were employed only in some allied process like lithographing, pattern folding, sample card mounting, or printing. Interviews with those girls whose records were not complete or recent enough to be tabulated, or who were employed in some allied process, often, however, threw light on conditions of work and thus contributed data to the investigation.

Such a case study of workers is more time-consuming than is the investigation of work places. The visits must be made at night to find the girls at home from work. It is seldom possible for one person to talk fully with more than two in an evening, and often the whole time is given to one. The majority of the interviews were in the homes of the workers, although several girls were met in the office of the Alliance Employment Bureau, and a few at a social settlement. Plenty of time was allowed for full and frank discussion. The record cards were not used during the conversation, lest their appearance should have a chilling effect.

The investigators who took part in the field work for long or short periods in the course of the study were Miss Louise C. Odencrantz, Miss Zaida E. Udell, Miss Elizabeth L. Meigs, and

the writer. Miss Odencrantz also tabulated the records and compiled the statistics used in these chapters.

To those who expect investigators to outline a single, clear-cut method of reform, these pages may be a disappointment. The material is not arranged as an argument in favor of any special social program. It proves rather the complexity of the problem and the necessity of varied methods of approach. It is designed to afford full and detailed information presented without bias, in the hope of enlisting the interest of those who as employers, as workers, as teachers, as legislators, as voters, or as buyers, share responsibility for the welfare of wage-earning women.

CHAPTER II

THE BOOKBINDING TRADE

THE bookbinder of today has a more complex business to manage than did his predecessor of two or three hundred years ago. His products are used so widely that he serves practically every trade, business, or profession in the community. He binds the Bible, Shakespeare, and many less classic writings for individual customers. He covers several thousand volumes of a new novel for a publisher. He takes an order from a printer to bind copies of a pamphlet. He stitches programs for a theater or an opera house, or fastens together the sheets of a church calendar. He makes manifold books for the use of saleswomen in department stores. He puts together the leaves of a telephone directory and pastes on the cover. He works for stock brokers, lawyers, gas companies, steel corporations, and banks, binding briefs, numbering checks, paging cash books, and rebinding heavy ledgers. He folds, stitches, and mails magazines for publishers, and makes albums, not so often now-a-days for family photographs as for postal cards and kodak pictures. He binds school books, and rebinds volumes for the public library. Sometimes he takes

over work from another bookbinder, who has secured an order too large for him to handle alone, or who is specializing in some other line. He also handles trade catalogues, and all sorts and conditions of advertising material, thus being called upon to adjust his business to the seasons and market conditions of every occupation which uses printed advertisements. And with all this extension of the trade have come changes in methods and conditions which have exerted a far-reaching influence on the welfare of the workers. In New York, where more bookbinders congregate than in any other city of the United States, this complexity is magnified.

Nevertheless, in spite of the variety of products and processes involved in the modern industry, to many the word "bookbinding" still suggests only morocco and gold leaf,—the artist's design, the craftsman's skilful touch. But the treasures of the bibliophile are produced in only a very few small shops in New York today, and in the large binderies, equipped with machinery, the methods which have been adopted bear slight resemblance to the ancient art of bookbinding.

The careful hand work of the eighteenth century is eclipsed by machinery, and the detailed accounts rendered by Roger Payne to his customers would make the bookkeeper of a modern bindery smile in wonder. His bill for binding a copy of "Aeschylus Glasguae MDCCXCV Flaxman illustravit," reads:

Pasting Machine

Edge Gilders

"Bound in the very best manner, sew'd with strong Silk, every Sheet round every Band, not false bands: the Back lined with Russia Leather, Cut Exceeding large; Finished in the most magnificent manner. Embordered with ERMINE expressive of The High Rank of the Noble Patroness of The Designs, The other Parts Finished in the most Elegant Taste with small Tool Gold Borders Studded with Gold; and small Tool Panes of the most exact Work. Measured with the Compasses. It takes a great deal of Time making out the different measurements, preparing the Tools, and making out new Patterns. The Back Finished in Compartments with parts of Gold studded work and open Work to relieve the Rich close studded work."* He continues with a description of his methods, as further justification for the size of his bill: "All the Tools except studded points are obliged to be worked off plain first, and afterwards the Gold laid on and Worked off again. And this Gold Work requires double Gold being on Rough Grained Morocco. The impressions of the Tools must be fitted and cover'd at the bottom with Gold to prevent flaws and cracks."

But archaic as this description sounds, bookbinding has a history beginning long before the time of Roger Payne. Preceding him were Grolier in France in the reign of Francis I, the Italian binders of the fifteenth and sixteenth cen-

* Quoted in Encyclopedia Britannica, 9th edition, 1876. Vol. IV, p. 42.

turies, the monks in the dark ages, who executed elaborate bindings for the preservation of their hand-written volumes, and earlier still the slaves who bound manuscripts when the Roman Empire was at the height of its power. Older than these were the palm leaves "bound" by silken strings, which formed the sacred books of Ceylon, and still more ancient the tiles of baked clay encased one within another.*

Nor was the delicate art of bookbinding in early days confined to men. On the contrary there are scattered references in history and in fiction which indicate that for several centuries women have helped to bind books. Stevenson tells us that in 1450 in the court of Blois, a woman, the widow of a bookbinder, bound books for Charles of Orleans.† "He (Charles of Orleans) was a bit of a book-fancier, and had vied with his brother Angoulême in bringing back the library of their grandfather Charles V when Bedford put it up for sale in London. The duchess had a library of her own; and we hear of her borrowing romances from ladies in attendance on the blue-stocking Margaret of Scotland. Not only were books collected, but new books were written at the court of Blois. The widow of one Jean Fougère, a bookbinder, seems to have done a number of odd commissions

* Zaehnsdorf, J. W.: Bookbinding, Introduction. London, George Bell and Sons, 1903.

† Stevenson, Robert Louis: Works, Vol. XIV, Familiar Studies of Men and Books, Essay on Charles of Orleans, p. 233. New York, Charles Scribner's Sons, 1895.

for the bibliophilous count. She it was who received three vellum skins to bind the duchess's Book of Hours, and who was employed to prepare parchment for the use of the duke's scribes. And she it was who bound in vermillion leather the great manuscript of Charles's own poems, which was presented to him by his secretary, Anthony Astesan,with the text in one column, and Astesan's Latin version in the other."

And as time went on it is evident that the art was one in which the plodding industry as well as the taste of women found employment, for we learn from Victor Hugo that about the year 1800, Jean Valjean in the fourth year of his captivity had news that his sister was trying to support herself and her little son by binding pamphlets in Paris.* "Every morning she went to a printing office, No. 3 Rue de Sabot, where she was a folder and stitcher; she had to be there at 6 in the morning, long before daylight in winter. In the same house with the printing office there was a day school, to which she took her little boy, who was seven years of age. But as she went to work at 6 and the school did not open till 7 o'clock, the boy was compelled to wait in the yard for an hour, in winter,—an hour of night in the open air. The boy was not allowed to enter the printing office, because it was said that he would be in the way."

Long before 1800, however, the industry had

* Hugo, Victor: Les Misérables. Fantine, Book II, Chapter VI, pp. 128–129. Boston, Little, Brown and Co., 1887.

crossed to America, for we have the account of one Hugh Gaine,* who in 1752 had a printing and binding establishment in Hanover Square, New York. It is probable that as soon as men began to practice the art in the United States, women were employed for some of the processes. In 1834 when Harriet Martineau visited this country she found women engaged as folders and stitchers. The reference in her book† is as interesting for her emphatic denunciation of the social conditions that prevailed at the time as for her disclosure that the trade of bookbinding was one in which women were supporting themselves. In a country "where it is a boast that women do not labour," she wrote, "the encouragement and rewards of labour are not provided. It is so in America. In some parts there are now so many women dependent on their own exertions for a maintenance, that the evil will give way before the force of circumstances. In the meantime, the lot of poor women is sad. Before the opening of the factories, there were but three resources; teaching, needle-work, and keeping boarding-houses or hotels. Now there are the mills; and women are employed in printing offices as compositors, as well as folders and stitchers."

Before the date of Harriet Martineau's visit, Philadelphia had become the largest publishing

* Depew, C. M.: One Hundred Years of American Commerce, p. 642. New York, D. O. Haynes and Co., 1895.

† Martineau, Harriet: Society in America, Vol. II, p. 257. New York, Saunders and Otley, 1837.

center, and boasted "the greatest publisher in the United States," Mathew Carey.* Thus some very early products of the bindery trade in this country were such pamphlets as "An open letter to the ladies who have undertaken to establish a house of industry," published in 1831 by Carey, and "An appeal to the wealth of the land on the character, conduct, situation, and prospects of those whose sole dependence for subsistence is on the labour of their hands," a document issued in 1833. Indeed, Carey himself took an active interest in the conditions of women's work, carrying on a pamphlet and newspaper agitation for better wages for them, and presiding at a large meeting of working women, which included bookbinders. This meeting was called for the purpose of organizing the Female Improvement Society, with committees representing different trades.†

When the printing press came into general use and multiplied the number of books, necessarily the careful binding heretofore accorded a single laboriously written manuscript gave place to more rapid methods of preparing volumes for the hands of readers. Separated in beauty of form and finish as is a Grolier edition of De Bury's Philobiblon from a quarterly telephone directory, there

* Depew, C. M.: One Hundred Years of American Commerce, p. 314. New York, D. O. Haynes and Co., 1895.

† Report on Condition of Woman and Child Wage-earners in the United States. Vol. X, History of Women in Trade Unions, pp. 39–40. U. S. Senate document No. 645. Pages 40–41 refer to a strike in 1835 by the Female Book Union Association in New York in an effort to secure "a small advance in their list of prices."

is a fundamental resemblance in the processes of binding. In both it is the task of the binder to take the sheets as they have come from the printing press, and so treat them that their preservation in proper sequence will be assured. Whether a book is to be bound by hand or machine, whether it is to be covered with levant or thin paper, whether it is to be sewed with linen thread or stitched with wire, it is necessary to fold the sheets in uniform size, to fasten the folded sections together in proper sequence, and to put on a cover. It is in the covering that the branches of the trade differ most widely. The making of the hand-bound book, designed to last several generations, demands the most numerous processes. At the other extreme is the paper-covered pamphlet whose destination is likely to be the nearest waste basket.

THE PROCESS OF BINDING

If a book is to be bound by hand, the printed sheets are first folded to the desired size. For example, a quarto sheet is folded into two folds making a section of four leaves or eight pages, and an octavo into four folds making a section of eight leaves or 16 pages. The sections are then gathered in proper sequence, as indicated by a number called "the signature" printed on the first page of the section. They are then beaten with a hammer or rolled in a machine to make them a compact volume. They are next "col-

lated," or examined, to make sure that each page is in its proper place. At various stages the volume is pressed. If the book is to be sewed "flexible" on raised cords, the back must be marked to show the position of the cords, and if they are to be embedded in the back, grooves are sawed for them. When the end papers have been put in, the rough edges trimmed, and the back rounded, the book is ready for its cover. The ends of the cords are drawn through holes in the mill-boards (the stiff foundation of a cover), pasted, and hammered smooth. The edges of the pages are cut with the "plough" in the cutting machine, to give each page uniform margins. The edges may then be sprinkled, colored, or gilded, after which the head-bands are attached to the back at top and bottom. Finally, the book is covered with leather or silk or some other material, and the cover is ornamented. These last processes vary with the kind of material used and the plan of ornamentation.

The machine method of binding books omits many processes of hand binding, and combines others into one simple operation. In hand binding, one book is the center of attention until it is finished, and each volume may receive slightly different treatment according to the design chosen for it. In machine binding, the method is to repeat one process thousands of times, adopting the factory system with its division of labor and its mechanical devices. Books and their covers are

fed by the hundred through machines in different departments, and they are not brought together until the last stage is reached. Machines fold, gather, smash, sew, trim, round, and back. The backs are lined up and glued in quick succession, and in gilding the edges, instead of handling the volumes one by one, several are placed in a "lying-press" and gilded simultaneously. These processes involved in getting the sheets ready for the cover are called "forwarding."

In the meantime, the cover or case is being prepared. The boards and the cloth are cut to fit the volume, and both are fed into the case-making machine, which covers the cloth with glue, lays the boards in their proper places, pastes a strip of paper on the back, and turns down the edges of the cloth, all in one complex operation, delivering the finished cases at the side of the machine. If the covers are to be ornamented or lettered, gold leaf, or some substitute, is laid on by hand, and the titles or designs stamped into the cloth by means of a powerful press. The "forwarded books" and the covers are then fed into the casing-in machine, which smears the sides of each volume with paste and automatically attaches the covers.

A pamphlet must be folded and its sections placed in as accurate order as a book bound in cloth or morocco, but as the pamphlet is to be covered only with heavy paper it does not require pressing, trimming, and retrimming, rounding and backing, gluing, lining-up, drawing-off, and all the

other diverse manipulations by which the hand worker on a single volume insures the preservation of the sheets in a solid and substantial binding. A pamphlet may be so printed that its sheets when folded must be inserted one within the other. In that case the paper cover may be put on before the pamphlet is stitched, and a wire staple, taking the place of the linen thread used in books, may be inserted from the back of the cover through the center of the inner sheet. Or the sections may be laid one on top of the other, and stitched flat along the back a short distance in from the edges. Then the cover is pasted, by hand or by machine, to the back of these stitched sheets.

A magazine or periodical is in reality a pamphlet, but it is characterized by uniformity of size week after week, or month after month. Thus it lends itself admirably to machine production. When the gauges have once been set to fit the sheets they need not be changed, and it is possible to combine several machines in one.

A word must be said of blankbook making, although this report concerns mainly the binding of printed books. The blankbook maker does not receive the sheets from a printer ready for binding. His trade includes the ruling and numbering of the pages of account books, ledgers, diaries, address books, albums, copybooks, and portfolios. In his craft, as in that of the "printer's binder," the processes of work vary with the degree of preservation required for the sheets. A heavy ledger, of

inestimable value to some business establishment, may be bound and rebound by hand in the most substantial way. A school child's copybook may be sewed by machine without any elaborate preparation for a covering. With the introduction of card systems and loose leaf note books, a great change has come over a portion of the blankbook maker's trade, and in some cases the "binder" has become the "manufacturer of loose leaf devices."

BRANCHES OF THE TRADE

Variety in products and in methods of work has divided the bookbinding trade into branches, with diverse processes, different machines, and distinct labor conditions. In the "job" bindery, for instance, each book is bound by hand for a "private" as distinguished from a "business" customer. The owner may be an art binder, who ornaments the covers of books with beautiful designs, or he may omit all ornament and devote his attention merely to executing a strong and durable piece of work. In the "edition" bindery, as its name implies, editions of thousands of volumes, all alike, are turned out by machines. The customers are usually publishers, unless the printer, from whom the binder receives the printed sheets of the book, acts as middleman between publisher and binder. In the "pamphlet" bindery, pamphlets are folded, stitched, and covered, but no books are bound in cloth or leather. In the "magazine" bindery, periodicals are bound and mailed. The customers

Sewing Books by Hand

Sewing Books by Machine

are publishers, or printers who make the contract with the publishers and then give out the binding to other establishments. In the "blankbook" bindery paper is ruled and blankbooks manufactured or rebound. The customer may be an individual or a firm giving an order for a single job, or a wholesale stationer ordering books in large quantities.

These five—job, edition, pamphlet, magazine, and blankbook binding—are the distinct branches of the trade. One bookbinding establishment may include them all. It may be equipped not only with wire-stitching machines, but with sewing machines. Not only may pamphlets be covered, but books may be bound. A woman, sitting before an old-fashioned frame, may sew a single book for a private customer, while, at the same time, a hundred thousand copies of a monthly magazine may be passing through the gathering machine. An establishment may lack one department necessary for the complete binding of a book, and a block or more away may be found another devoting its entire force to the work of that one department. For example, the trade includes firms whose only work is to gild the edges of books, or to lay the gold and stamp the covers, or to number checks, bonds, and insurance policies. Marbling papers for the use of binders is now regarded as a separate industry. This specialization has made possible the work of a middleman or agent,—to transfer a single branch of the work from the

binder who does not wish to handle it to the firm which makes it a specialty. Nevertheless, the middleman does not seem yet to be conspicuous in the industry.

THE TRADE IN NEW YORK

The most important center of the bookbinding trade in the United States is New York City.* The value of the products of New York binderies is 36 per cent of the total value of these products in the whole country. In the borough of Manhattan alone, 280 binderies, including temporary departments, were found in the course of this investigation.

TABLE 1.—BINDERIES IN MANHATTAN, BY NATURE OF PRODUCTS, 1910

Binderies	*Number*	*Per Cent of all Binderies*
All binderies	280	..
Binderies engaged in—		
Edition work	55	20
Pamphlet and magazine work	149	53
Job or art work	44	16
Blankbook making, ruling, numbering, etc.	74	26
Binding departments of establishments engaged in—		
Lithographing	13	5
Printing	98	35
Engraving, manufacture of stationery, etc.	26	9

Of the binderies in Manhattan, 53 per cent bind pamphlets and magazines, 20 per cent do edition

* Cf. United States Census, Bulletin 59, New York State, Manufactures, p. 50, 1905.

work, 16 per cent job or art work, 26 per cent blank-book work, 5 per cent are departments of lithographing establishments, 35 per cent printing offices, and 9 per cent are allied with engraving, stationery work, etc. These divisions are not mutually exclusive. It is often difficult to classify an establishment as an edition bindery, or a pamphlet or magazine bindery, as the different products may be found in the same workroom. In that case the shop has been counted in each of these branches of the trade.

The bookbinding trade has tended not only to concentrate in New York, but much of it has crowded into a single district of the city. The section of Manhattan Island about the City Hall may be regarded as the heart of the industry. Within a radius of a mile of the City Hall, in a semi-circle east of Broadway, 126 binderies, 45 per cent of the total in the borough of Manhattan, are located.

Between 1900 and 1905 the importance of the trade in New York state increased from $5,354,004 to $7,557,640, in capital invested, an increase of 41.2 per cent; from 7,152 to 7,984, or 11.6 per cent, in number of wage-earners; from $3,152,739 to $3,648,146, or 15.7 per cent, in total amount paid in wages; and from $9,049,198 to $11,165,333, or 23.4 per cent, in value of products.* The classification of establishments according to value of

* United States Census, Bulletin 59, New York State, Manufactures, pp. 6, 10, 1905.

products brings to light the fact that in New York state in 1905, 212, or 69.7 per cent, of the total number of bookbinderies reported the value of their yearly output as less than $20,000 for each establishment, while only 26, or 8.6 per cent, valued their products as high as "$100,000 but less than $1,000,000." This small group of 26 binderies reported 72.7 per cent of the total capital, about $5,500,000, and 53.9 per cent, or 4,306, of the total number of wage-earners in the bookbinding industry in New York state, while the much larger group of 212 binderies jointly claimed only 10 per cent, about $750,000, of the capital, and 17.7 per cent, or 1,408, of the number of employes.* Thus the greater part of the industry is in the hands of a few, whose establishments, in value of products and number of employes, outrank the combined forces of more than nine-tenths of the employers in the trade.

Official figures in the United States census indicate a steady growth in the number of women employed in the bookbinding trade since 1870, when for the first time wage-earning women were separately classified according to their occupations. Indeed, it was not until 1850 that any detailed inquiry regarding wage-earning pursuits was made by census enumerators, and even then these questions did not apply to women and slaves. At that time 3,414 men over fifteen years of age were

* United States Census, Bulletin 59, New York State, Manufactures, p. 41, 1905.

recorded as bookbinders.* A decade later, in 1860, the trade of every free person, man or woman, was ascertained, but in the tabulation men and women were grouped together, so that for that year only the total number of bookbinders, 6,360, is known. In later years men and women ten years of age and over were counted separately. The facts are shown in Table 2.

TABLE 2.—NUMBER OF PERSONS ENGAGED IN BOOKBINDING IN THE UNITED STATES, BY DECADES. 1850–1900[a]

Census Year	*All Persons*	*Men*	*Women*	*Per Cent Women*
1850	..[b]	3,414	..[b]	..
1860	6,360	..[b]	..[b]	..
1870	9,104	6,375	2,729	30.0
1880	13,833	8,342	5,491	39.7
1890	23,858	12,298	11,560	48.5
1900	30,278	14,646	15,632	51.6

[a] Twelfth United States Census, 1900. Special Reports, Occupations, pp. lii, lx.

[b] Facts not given in the Census.

Thus, in 1870, when for the first time women in occupations were counted separately, 2,729 women and 6,375 men were found to be employed in the bindery trade in the United States. Of these groups, 1,309 women and 1,898 men were living in New York and Brooklyn.† From this decade on, not only did the number of bookbinders (men and

* Twelfth United States Census, 1900. Special Reports, Occupations, p. lx.

† Ninth United States Census, 1870. Vol. I, Population and Social Statistics, pp. 779, 793.

women) increase, but the proportion of women in the trade grew rapidly larger. In 1870, 30 per cent of the employes in binderies were women and 70 per cent were men; in 1880, 39.7 per cent were women and 60.3 per cent were men; in

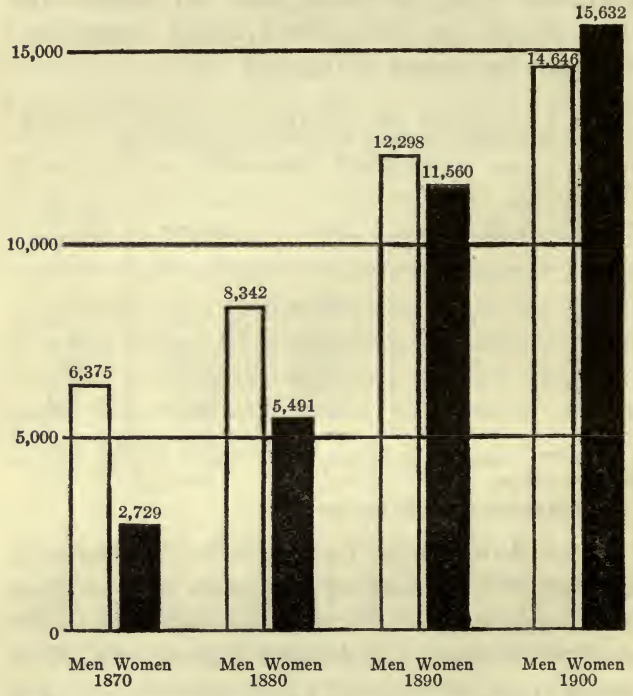


CHART I. —MEN AND WOMEN BOOKBINDERS IN THE UNITED STATES, 1870, 1880, 1890, AND 1900

1890, 48.5 per cent were women and 51.5 per cent were men; in 1900, 51.6 per cent were women and 48.4 per cent were men. The facts are shown in Chart I.

In 1900, more than 14,000 men and over 15,000 women were counted as bookbinders throughout the country.

TABLE 3.—DISTRIBUTION OF WOMEN BOOKBINDERS. UNITED STATES, 1900[a]

Residence	Women Bookbinders	
	Number	*Per Cent*
New York, N. Y.	4,086	26.1
Chicago, Ill.	1,612	10.3
Philadelphia, Pa.	1,168	7.5
Boston, Mass.	897	5.7
St. Louis, Mo.	487	3.1
Washington, D. C.	279	1.8
Cambridge, Mass.	274	1.8
Milwaukee, Wis.	267	1.7
Jersey City, N. J.	265	1.7
San Francisco, Cal.	225	1.4
Cincinnati, O.	215	1.4
Buffalo, N. Y.	208	1.3
Cleveland, O.	172	1.1
Baltimore, Md.	164	1.1
Detroit, Mich.	158	1.0
Other cities of 50,000 or more	2,372	15.2
Smaller cities and country districts	2,783	17.8
Total in the United States	15,632	100.0

[a] Twelfth United States Census, 1900. Special Reports, Occupations.

Considered geographically, the census states that four-fifths of the bindery women in the United States were found in the North Atlantic division, which includes the three cities of Boston, Philadelphia, and New York.* Of these three cities

* Twelfth United States Census, 1900. Special Reports, Statistics of Women at Work, p. 196.

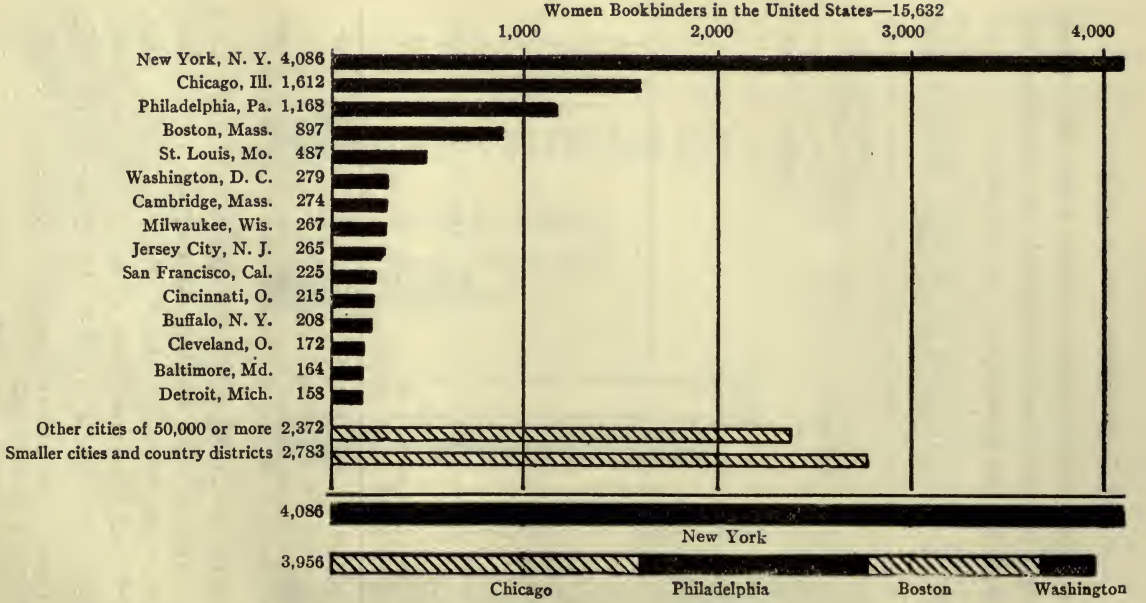


CHART II.—WOMEN BOOKBINDERS IN THE UNITED STATES, BY PLACE OF RESIDENCE

the census reports that New York employed 4,086, Philadelphia, 1,168, and Boston, 897.

Thus Philadelphia has surrendered to New York her supremacy of the time of Mathew Carey. Chicago, also, employing 1,612 women, had outstripped Philadelphia. These data are shown graphically in Chart II.

The numbers given for New York in that year are, however, not representative of conditions today. According to our investigation, verified by comparison with the records of the State Department of Labor, about 6,000 women are now at work in binderies in the borough of Manhattan alone.* Table 4 shows roughly their distribution in the different branches of the trade.

TABLE 4.—WOMEN EMPLOYED IN BOOKBINDING IN MANHATTAN IN 1910, BY PRINCIPAL PRODUCT OF BINDERIES AND NUMBER OF WOMEN EMPLOYED[a]

Product of Binderies	Women in Binderies Employing		All Women	
	Less than 50 Women	*50 or more Women*	*Number*	*Per Cent*
Edition work[b] . .	515	2,433	2,948	48
Pamphlet and magazine work only .	1,338	835	2,173	35
Job and art binding .	96	..	96	2
Blankbook making .	936	..	936	15
Total . . .	2,885	3,268	6,153	100

[a] Information on this point was secured for 243 binderies, although only 210 were more thoroughly investigated. In all, 280 binderies, or bindery departments, were found in Manhattan. Of these, 37 did not report number of employes.

[b] Includes binderies with important pamphlet departments, but the chief work in each case is edition.

*For statement as to sources of information see Note at close of this chapter, pp. 36–37.

Establishments whose chief work is edition binding employ 2,948 women, or 48 per cent of the total number found at work in this investigation. Binders of pamphlets and magazines employ 35 per cent, and blankbook makers 15 per cent. Only 96 women (2 per cent) work in hand binderies. As to the size of establishments, the table shows that the largest group in the edition branch of the trade work in binderies employing 50 or more women, while the majority of pamphlet and magazine binders are in small establishments. All the job or art binderies and the blankbook manufactories investigated have forces of less than 50 women.*

NATIVITY OF BINDERY WOMEN

Commenting on the fact that bookbinding is centered in the large cities of the country, the census characterizes it as "an occupation in which 57.4 per cent of the women employed are the daughters of immigrants."† Without knowing the names

*According to the report of the State Department of Labor for 1910, 1,155 men and women in the bookbinding trade in New York City were employed in shops whose force numbered less than 20; 4,706 worked in binderies employing 20 to 199, while only 2,254 were in establishments employing 200 or more. Report of the New York State Department of Labor, Factory Inspection, 1910, p. 316.

The typical form of ownership has been the individual rather than the firm or corporation, but both individual and firm ownership lost ground in New York between 1900 and 1905 while corporation ownership increased. Of all the binderies in the state, only 15.1 per cent are incorporated, but they employ 49.8 per cent of the total number of wage-earners in the industry. U. S. Census, Bulletin 59, New York State, Manufactures, p. 33, 1905.

†Twelfth United States Census, 1900. Statistics of Women at Work, p. 35.

of the countries from which these immigrants come, however, such a statement would give a wrong impression of the nativity and extraction of bindery girls in New York. Of 16 trades listed in the census as employing 1,000 or more women in New York, bookbinding actually has the largest proportion of workers of native parentage. The birthplaces of the girls interviewed in this investigation and the nativity of their fathers are shown in Table 5, with a column added giving the corresponding census figures.

TABLE 5.—NATIVITY AND NATIVITY OF PARENTS OF WOMEN EMPLOYED IN BOOKBINDING, NEW YORK CITY

Country of Birth	Data of Present Investigation[a]				Census Figures	
	Women Born as Specified		*Women with Fathers Born as Specified*		*Women with Parents Born as Specified*[b]	
	Number	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
United States	178	90.4	47	28.7	902	22.1
Ireland . .	3	1.5	59	36.0	1,791	43.8
Germany .	4	2.0	20	12.2	670	16.4
Italy . .	7	3.6	15	9.1	34	.8
Russia[c] . .	4	2.0	8	4.9	72	1.8
Great Britain	..	..	3	1.8	254	6.2
Other Countries[d]	1	.5	12	7.3	363	8.9
Total . .	197	100.0	164	100.0	4,086	100.0

[a] Of 201 women interviewed, 4 did not supply information as to nativity, and 37 as to nativity of fathers.

[b] Both parents born as specified, or one as specified and the other native born. Mixed foreign parentage is included under "other." Twelfth United States Census, 1900. Special Reports, Occupations, p. 640.

[c] Including Poland.

[d] Includes Bohemia, Scandinavia, Canada, France, Australia.

Of the girls interviewed, 90 per cent were born in the United States and 29 per cent were of native-born parentage, while the largest group (36 per cent) were children of Irish fathers, a nationality not regarded as "foreign" in New York. The census figures show 22 per cent native parentage, and 44 per cent Irish, but in the rank of nations represented the census in a general way confirms our results, even though the proportions are not identical. Judging by these figures, the bookbinding trade in New York is an excellent occupation in which to study the conditions of employment of native born, wage-earning women.

NOTE TO CHAPTER II

Four sources of information are considered in ascertaining the number of women employed in binderies in the borough of Manhattan,—the census statistics of population in 1900, the census statistics of manufactures in 1900 and in 1905, the report of the New York State Department of Labor for the years ending September 30, 1905, and 1910, and the records of the investigation on which this report is based. Both the census figures and the factory inspectors' reports include other minor occupations in the same group and do not distinguish the different branches of the trade. In our own investigation we have tried to ascertain the minimum and maximum number of women employed during the year, but frequent changes in organization made it very difficult to secure exact information. The interlocking of the various branches of the trade with each other and with allied occupations also made accurate classification almost impossible. The combined data show some contradictions.

In 1900, according to the census of population, 4,086 women bookbinders were counted in households in New York City, of whom 1,974 were living in Manhattan and the Bronx, and 2,051 were living in Brooklyn. (Undoubtedly many bindery women who work in Manhattan live in Brooklyn, and, in the population statistics, were enumerated in Brooklyn.)

In 1900, according to the census of manufactures, 3,119 women were counted in binderies in New York City, of whom 2,957 were working in Manhattan and the Bronx and 162 were working in Brooklyn.

In 1905, according to the report of the State Department of Labor, 3,365 women were counted in binderies in New York City, of whom 2,831 were working in Manhattan and the Bronx, and 492 in Brooklyn.

In 1905, according to the census of manufactures, 3,382 women were counted in binderies of New York City, of whom 2,920 were working in Manhattan and the Bronx, and 462 were working in Brooklyn.

In 1910, according to the report of the New York State Department of Labor, 4,003 women were counted in binderies in New York City, of whom 3,024 were working in Manhattan and the Bronx, and 964 were working in Brooklyn.

In 1908–10, according to this investigation, 6,153 women were counted in binderies in Manhattan alone. For the purpose of verifying our figures, a complete list of binderies investigated in Manhattan was sent to the office of the Department of Labor, and through the courtesy of the commissioner the facts regarding the number of employes were transcribed from the department's records of inspections. According to this list there were 5,653 women employed in binderies in Manhattan. Such a figure may be reconciled with our own data by bearing in mind the numerous seasonal changes in the trade. The discrepancy between it and the published report of the State Department of Labor is due to the fact that bindery departments of establishments engaged in allied occupations are sometimes numbered under the heading of the allied industry rather than counted separately.

CHAPTER III

WOMEN'S WORK IN THE BINDERIES

WOMEN stand only on the threshold of the bindery trade. Their work is chiefly confined to what is called the preparing department. They fold the sheets by hand or by machine, insert one within another or gather them in sequence, paste in pictures or maps, and sew the sections together with thread, or stitch them with wire. In pamphlet binding they also paste on the paper covers, but in edition binderies after the books have been sewed, women have no further share in the binding except to lay gold on the covers for lettering and ornamentation, and to examine and wrap the completed volumes. Thus they take no part in the important work of the forwarding department, which includes all the processes between sewing and covering, such as the trimming, rounding and backing, lining up and gluing, and gilding the edges. In the finishing department, where the boards for the covers are cut, "cases" made by covering these boards with cloth, titles and ornaments stamped, the finished covers attached to the forwarded books, and the volumes placed in a powerful press, the only tasks for women are to lay the gold leaf on the cover be-

fore it is stamped, and then to examine and wrap the books when they are ready for shipping.

These processes differ in different branches of the trade, and they have changed with the development of machinery. Among the women who told us about their trade were a few who had worked in binderies in New York in the 70's or 80's. One of them had been an apprentice thirty years earlier in Dublin. "We did only the best of work," she said, "Moore's Melodies, Shakespeare, and the Bible. We bound them in morocco or vellum. We women did the folding and the sewing and a little pasting. But now," she added, "the machines have changed it all. If ye'll look at a pamphlet, ye'll see that where we girls used to stitch with a sharp needle and a linen thread there's naught but a piece of wire." Nevertheless, the wire staple has not taken the place of linen thread, but rather the industry has widened to include both types of work. Description of a few typical binderies will best show the kinds of work women are doing.

A good illustration of machine methods, used not for pamphlets but for books, is found in the work of an edition bindery, an independent establishment which has neither publishing nor printing departments, and does no pamphlet or magazine work. The firm takes orders from publishers or printers who have no bindery plants. The sheets are received already printed, and piled on shelves in the center of the loft. When needed

for binding they are placed in a machine which cuts them to the size required for folding. They are then carried to the women's department.

The different methods of folding the sheets illustrate changes going on in the trade. They may be fed into one of the six "point" machines, or placed in the "automatic" or, very rarely, folded by hand, the hand tool for creasing the paper being a bone "folder," not unlike a dull paper cutter. If the point machine is used, a girl, sitting on a high stool, feeds each separate sheet into the machine, placing printed dots on needle-like points which serve as guides. The machine does the rest, driving the sheets in a zigzag course downward and toward the side, making a fold at each turn, and finally dropping the folded sections neatly into a box standing ready to receive them. They are then ready for the "knockers up" to lift out and "jog" straight on a nearby table. If the sheets are to be folded by the automatic machine, men employed in the bindery stack them under two rubber knuckles which push the sheets, one by one, toward the folding rollers. The only work for women in connection with this machine is to see that it folds the sheets properly—a task which is part of the forewoman's general work of supervision, and finally to lift the folded sections from the boxes into which they are delivered—the work of young girls who are learners in the trade. Between the point machine and the automatic is another invention, the drop-roll folding machine,

extensively used in the trade, but not found in this bindery. In it the points have given place to automatic gauges, and the women who feed it need only flick each sheet from the pile so that the machine can grip it. By dispensing with the points on which each sheet must be fitted, time is saved. Obviously the next step was to substitute rubber knuckles for the hands of women workers, with an automatic machine as the result.

After the sections are folded, plates or maps must be pasted in. For this process, hand workers are in the ascendancy in this bindery because the pasting machine is still on trial and only one is used. Six girls, employed to paste, also hand-fold any sheets which do not fit the folding machines.

The next task is to gather the folded and pasted sections to make the volume. These are placed on a table in separate piles, arranged in the order in which the pages of the book must follow each other. The gatherer walks along the row, taking a section from each pile in order until the book is complete. Then she compares it with a model volume, and places her mark upon it in pencil, thus making herself responsible for any mistakes. This examination is called collating. Sometimes the gathering is done by one set of girls and the collating by another. A gathering machine is on the market, but it is better adapted to magazines than to books, and the firm whose shop we are describing has not purchased one.

All the sewing in this establishment is done by

machines. Four girls are employed to feed them, and each has a helper, a learner who cuts the thread between attached volumes. These tasks complete the work of the women's department. In the finishing department, where the covers are made, ornamented, and attached to the books, three girls are employed to lay the gold on the cover before it is placed in the stamping press, and to clear off the superfluous gold after the title and ornament have been stamped. Three others examine and wrap the completed volumes for shipping. In all, about 30 women and an equal number of men are employed in this establishment.

It is in the magazine branch of the trade that the development of machines has been most marked. The methods of work, however, depend upon the size and shape of the magazine and the number of copies printed. For small issues it may not pay to have complicated and expensive machinery, and books of a certain shape cannot be handled by the machines now on the market. In one establishment in New York, four magazines are printed and bound. Three are the familiar size of a monthly periodical, about 10 inches long by 7 inches wide, and one is more than twice as large. The three small magazines are folded in the printing department, thus taking out of the bindery one of the processes usually allotted to women. When brought from the printing presses the folded sheets are stacked in piles reaching almost to the ceiling. Young girls do this work of

Case Makers

Gathering and Wire-stitching Machine

(Next in order are the covering machine, the trimmer or cutter, and girls wrapping and mailing. Note cleanliness, provision for ventilation, space, and light.)

stacking, which is called "beating up." It is from these piles that the sections are taken to the combined gathering and wire-stitching machine. The gathering machine has a succession of boxes, one for each signature. These are filled in proper order by girls, and the machine set in motion by the operator. In this bindery the operator is a man, although in some very large shops the task has been assigned to women. The machine takes a section from each box and when the gathering is completed passes the magazine along to the wire-stitching machine which puts in the wire staple to hold the pages together. This obviates the necessity of having an operator place each book under the needle and press the pedal. After being covered, also by machine, the magazine is completed.

The fourth magazine, whose pages are much larger, requires a different method of binding. It is neither folded on the printing press nor collected by the gathering machine. Some of its sheets are fed into a drop-roll folding machine operated by a girl. One sheet, a two-fold, is folded by hand. Instead of being gathered one on top of another, the sections are inserted one within another, with the cover as the outer sheet. When gathered they are opened at the center, slipped over "the saddle" of the wire-stitching machine, and the wire inserted. Thus the sections are stitched together and the cover put on in one operation.

If the publishers of one of the three smaller

magazines should decide to enlarge the size of the pages, conditions in this workroom would be changed. The gathering machine would then be in operation two weeks instead of three as at present, additional folding machines and wire-stitchers would be needed, and the force of hand folders and inserters would be doubled. This has actually happened in another magazine bindery. Thus the apparently simple decision of an editor, who may never have seen the binders of his magazine, may cause a complete change in organization in a bindery.

The development of complex machinery, however, has not done away with the old-fashioned sewing machine, nor with any other of the centuries-old processes of hand binding. These are still needed in the rebinding of single volumes for individuals, for public libraries,* or for magazine publishers who want the year's issue preserved in one book. In one of these hand binderies in New York the force of girls varies from three to 10, according to the season and the orders received. When visited in the course of this investigation, the maximum force of 10 women and about twice as many men was employed. One girl was "taking apart" books to be rebound. To "take apart" a book is to remove the covering and to separate the sections, one by one, so that they are ready to be

* In the New York public libraries alone, the number of volumes rebound in a year is 100,000. They are not of uniform size, of course, and so cannot be handled by machine.

sewed again. The pages are then mended or cleaned if necessary. Another woman was pasting in guards for plates—the name given to the full-page illustrations in a book. Eight women were sitting before the frames which are used for hand sewing. When the books have been sewed, they are forwarded and finished by men. As the covers are tooled and not stamped, the gold is applied when the tooling is done, and is never laid on in leaf form by another worker, as in edition binderies. This establishment is typical of hand binderies in every respect except in the number of women employed. Usually not more than two or three sewers are needed, and they do the general work of taking apart, refolding, if necessary, pasting, and sewing.

Thus in hand binderies also the girls' work is limited to a few preparatory processes. Although in the art branch of the trade, where the hand methods already described are used, a few women have proved that they can successfully and artistically bind a book from the first process of folding to the final tooling, they have not yet been successful enough from the commercial point of view to create new opportunities for any large number of women in the trade. The most successful of them are emphatic in their warnings that to earn a living by executing artistic bindings a woman must possess a rare combination of the skill of artist, craftsman, and business woman, and in addition she must work hard, concentrate her

efforts, and have enough capital to live on during the apprenticeship period and the first years of her career as a bookbinder. Women art binders, then, are so few in number, and have so much more in common with the arts and professions than with the industry of bookbinding, that they cannot be regarded as representative of the large group of girls who are trying to earn a living by folding, or knocking up, or wire-stitching. Nor does it appear that the art binder is blazing a trail which is likely to lead these other workers toward larger opportunities. The typical woman bookbinder is the one who is at work in the commercial binderies performing certain tasks known in the trade as women's work.

Although in one sense these tasks of women are merely preliminary processes, nevertheless they are important, and require speed and deftness of touch. Unless women do their part well the book may be ruined. In hand folding, the printing on each page must exactly coincide in position with that on the other pages, so that when the book is trimmed the margins may be uniform. Thus, not the edge of the sheet but the printing on the page must serve as a guide. Furthermore, the fold must be neat and true and well creased. To deftness and to accuracy must be added speed. A college graduate who once went to work in a bindery practiced hand folding for four weeks without being able to pass beyond the stage of the beginner.

In machine folding, an understanding of hand

folding is necessary to detect errors in the machine work, and in addition the operator must have some knowledge of the working of the machine and be able to feed the sheets at the right speed to keep pace with its movement. Very much the same requirements—ability to detect errors, to handle the sheets deftly and quickly, and to manage a machine—are necessary in the work of filling the boxes of the gathering machine and in operating the wire-stitching machine or the sewing machine. To run the sewing machine, however, is considered the most skilled work in the bindery, partly because the books which are sewed are more valuable than the wire-stitched pamphlet or magazine, and partly because the process is complex. To touch the back of a section with paste and then to place it over the revolving arm of the machine, while picking up the next section, watching the threads, and throwing aside badly folded or mutilated sheets, requires the sort of co-operation of head and hand which cannot be acquired without long practice.

The hand work too must be carefully done. "We do our own collating," said one girl, who was employed as a gatherer in an edition bindery, "and we're so afraid of making a mistake. They used to have collators besides the gatherers, but they found it was too expensive. When two girls work together we don't have so big a worry. If you come to the end of your book and find two or three sheets over, you wonder what has become

of the other sheets. You know you must have left one out or maybe gathered the same sheets twice. Nobody wants to buy a book that's got two signatures alike in it. But a girl who had been gathering a hundred years might make the same mistake as one that had been at it three months. When you do one thing all the time you lose the feeling in your fingers,—you're likely to pick up two sheets at a time."

"It's a strain in bindery work to be sure not to make mistakes," said another girl, in describing the work of the pasters. "A book is easily spoiled. I know a girl that put a picture of Longfellow in a copy of 'As You Like It.' Nobody knew it until she looked at another girl's book that had a picture of Shakespeare. She said, 'That doesn't look like the picture I pasted. He was a funny looking man, but not as funny as that.' It's bad to make mistakes like that. If the customer happens to be cranky, the book comes back." Some knowledge of the contents of books is an asset for a bindery girl.

Description of the demands made upon bindery girls or of the conditions under which they work would be misleading if it gave the impression of uniformity and permanence in methods. On the contrary, the irregularity of work and the frequent change in conditions are the characteristics of the industry which seem to be uppermost in the minds of bindery girls when they talk about their trade. Again and again a conversation

would begin with such a remark as, "I don't advise any girl to go into bindery work. It's a very uncertain trade. You never know when you'll be laid off. The machines are driving the girls out."

The machine is the great fact which looms large before the eyes of bindery women when they describe changes in their trade. They accept its introduction as they would accept a rainy day, but to them it often means that someone in the bindery will be laid off, and the calamity of unemployment is more immediate and real to the workers than the advantage of better methods of production to some unknown customer.

A survey of the catalogues of machine companies brings a vivid realization of the development of machine binding. The new inventions have been so fully described in the preceding pages that it is necessary only to summarize them here. In place of the hand folder is a self-feeding machine, or else an attachment on the printing press by which the process of folding is taken away from the bindery department.* Inserting may be done by machine. The pasting machine, a comparatively recent in-

* Recognizing this fact, a resolution was passed by the International Brotherhood of Bookbinders, in convention in June, 1908, which read:

"Whereas, cutting and folding machines are instruments of the bindery and as such should be conceded to be under the jurisdiction of International Brotherhood of Bookbinders; therefore be it

"*Resolved* By the delegates of this 11th annual convention that the President stand instructed or a special committee be appointed to attend the pressmen's convention immediately after I. B. of B. adjournment to present a suitable set of resolutions before the International Printing Pressmen and Assistants' union for ratification." *International Bookbinder*, Vol. IX, No. 6, p. 172 (June, 1908).

vention, takes the place of the girls who put in the "waste" papers, the blank sheets at the front and back of a volume. The gathering machine, too recent an invention to have made its way into all establishments, may rob hand gatherers and also, in cheap work, collators of their tasks. Wire-stitching machines and sewing machines are no longer regarded as innovations, but are well established throughout the trade. In many binderies pamphlets are covered by machine. From Germany comes a rumor of an attempt to construct an attachment for the stamping press, to do the work now done by gold layers. Finally, there is the further development of combination machines, which perform several operations, such as folding, inserting, gathering, and wire-stitching. The first introduction of a new invention is but the beginning of a long series of improvements. Manufacturers of machinery usually state in their catalogues that they will gladly construct any new attachments which customers may desire. The chief argument for the introduction of a new machine is usually that it is labor-saving. To save labor often means to dismiss a laborer, and behind the stories of the triumphs of the inventors one may expect to find the equally human, if less cheering, stories of the displaced workers. Their experiences are significant in so far as they illustrate the social problem of industrial readjustments. In anticipation of facts about wages, reference must be made in these illustrations to

changes in earning power resulting from changes in machines.

One girl had been employed in bindery work three years. As a learner she had knocked up sections folded by the point machines. When a vacancy occurred she was given a chance to operate the machine. It was not easy to learn, nor could it be done in a day or a week. At first she received a weekly wage of $4.50 as a learner, but "advanced rapidly" until she was earning $9.00 as an operator of the machine. One day (it was on Good Friday, 1908, she said, remembering the time vividly), an automatic machine appeared in the workroom and proved so successful that it was used in preference to the point folders. This girl was transferred to hand folding, which, she says, is "terrible work." It is hard to earn a living wage by hand folding; a cent or a cent and a half is paid for folding 100 sheets if one fold is necessary. If the sheets are large and heavy like those in a dictionary the work of folding is very exhausting, although the pay may be higher. This girl received 4 cents a hundred for folding the pages of an encyclopedia, but in spite of her efforts to work rapidly she could not earn more than $7.00 a week. At 4 cents for folding 100 sheets a worker to earn $7.00 must fold nearly 3,000 sheets in a day, or 17,500 in a week. Moreover, each sheet must be folded three times, and each fold creased smoothly by drawing the bone folding knife across the heavy paper. Even this laborious

work, however, was taken away from her when the encyclopedia was finished. The forewoman thought that there would be no more work for "point folders," and advised her to learn some other process elsewhere. She went to a bindery where she heard a point folder was needed, but the machine was not the same make as the one which she had been operating, and therefore she was not employed.* After a fruitless search for work in her trade, she found employment in a neckwear factory as a learner without wages. Later, as an experienced operator in this trade, she earned from $7.00 to $9.00 a week.

A general hand worker in another bindery was laid off after a year's employment because of the introduction of a folding machine which could be fed by a boy. "She walked the streets for three weeks," said her mother, "trying to find work." Then she became a waitress in a restaurant at $5.00 a week, plus tips. "There is much better money in waitress work than in binderies," she said. "They can't earn good wages in the bindery trade any more since all the machines have come in. When I told an old bindery hand that I earned $6.00 piece work the first week I ever did hand folding, she wouldn't believe me. She said they used to earn that much years ago, but not now."

* The style of this last machine was so out-of-date that inquiry at the office of its maker resulted first in a denial that the firm had ever manufactured any folding machines. Finally a picture of it was found in an old catalogue issued by this company.

An operator of a point folding machine worked in a large edition bindery. New inventions were introduced, and gradually more and more work was transferred to them. This girl was paid by the piece, instead of having a fixed weekly wage, and her earnings were depressed steadily as the machine which she was operating fell into disuse. She had learned only two other processes, hand folding and filling the boxes of the gathering machine. No gathering machine was used in this bindery, and the prices for hand folding were not high enough to yield a living wage. The forewoman offered to teach her to gather by hand. Gathering is not easy work. "At first," the girl said, "I was so tired at night I could hardly keep my eyes open at supper. I wish I had one of those things you put on your feet to measure the distance you walk; I'd like to know how many miles I walk in a day. There are no boys to carry our work. The folding machines are at the other end of the bindery, and we carry the work the distance from one street to another. That's a block." Her experience in handling sheets, however, made it possible for her to learn the new process easily, so that by the end of six months she was earning approximately from $10 to $11 a week, piece work, whereas the point folding machine had yielded her a maximum wage of only $9.00 or $10.

A girl who had been employed in the bindery trade for four years was an expert operator of a wire-stitching machine in a magazine bindery.

Her wages, at piece rates, ranged from $10 to $15. Then a combination gathering and wire-stitching machine was purchased. She was offered the work of filling the boxes of the new machine at a weekly wage of $8.10 (15 cents an hour). She refused, and secured work in another bindery in the same building, where the new invention had not yet been introduced, and where operators of wire-stitching machines were still in demand. But her earnings here ranged from $10 to $12, instead of from $10 to $15.

Another displaced worker was one of 12 gatherers who were laid off when a gathering machine was introduced. She had been employed in the same bindery nine years, and in the two busy weeks of the month she had earned $3.00 and sometimes $4.00 in a day. The machine was purchased in September, 1904. This girl and two others were retained for a remnant of hand gathering until the following January. "We cost the firm money," she said, "because there was a boy to carry sheets for us at $6.00 a week, and we were making good wages."*

In the slack weeks of the month this girl had been transferred occasionally to the office of the bindery. When she lost her position it occurred to her that she might address envelopes, fold circulars for mailing, and do general office work in

* Four years later the foreman stated that the machine had saved the firm nearly $30 a day in wages, because of its labor-saving character and its greater productive power.

Gathering by Hand

Gathering Machine

some other establishment. Two employment bureaus discouraged her in this ambition for a commercial career, and she finally applied at another bindery where her special work was to insert one folded sheet within another. Employment was steady throughout the month, and her average earnings were "about as much" as in her previous occupation.

In another bindery a gathering machine was installed on trial, and three or four collators were transferred to the work of filling the boxes. The machine did not prove satisfactory, and the girls went back to their hand work. Knowing, however, that inventors were busily striving to improve their mechanical devices, collators and gatherers alike were numbering their days, in expectation of another reorganization of their work.

One gatherer, who had had long experience, "made a fuss" when the gathering machine was introduced, and backed by her trade union (an organization to be described later), she was given an opportunity to operate it at a wage of $18, the regular rate paid to men for this work. She was successful, and the position was assigned her permanently. Young girls were employed to fill the boxes. The other gatherers were obliged to learn other processes in this establishment or seek work elsewhere.

Another worker had inserted the sheets of a weekly periodical, earning a maximum wage of $14 a week, at piece rates, when working over-

time. A machine was introduced which folded, gathered, inserted, and wire-stitched the magazine. It was operated by a man, and this girl with a dozen others was laid off. After working only one week in a pamphlet bindery where both "night and day gangs" of women were employed, she left because she was to be transferred to the night shift. The girls who worked at night "looked so worn out," she said. Two weeks later she found work as examiner and wrapper in an edition bindery, with a drop in wages from $14 to $5.00 a week.

The important fact common to all these stories is that no systematic effort was made to prevent the maladjustment, which was due not to the inefficiency of the workers, but to change in industrial organization. The displaced employes were given no chance to prepare for these changes; the appearance of the machine in the workroom was usually their first warning that they must seek other occupations. Yet the changes were not violent, but merely a gradual development of mechanical devices. Sometimes weeks passed before the worker finally left the bindery, after having been transferred to other processes. But in the unguided attempt to learn new processes or find other positions there was much wasted effort and loss of time.

It does not appear that this loss of time was a necessary evil. On the contrary, it seems very evident that solutions were possible, and that the suffering of the workers was due to the fact that

readjustments were matters of chance rather than of forethought.

Almost as important as the introduction of machinery is the failure to introduce it. Naturally all the larger establishments use machinery, although not always the newest models. None of those employing 50 or more women reported that they had no machinery, but small establishments frequently lack it. Of 210 binderies in which this question was asked 174 used some machine;* 36 firms owned no machines. Only 17 had gathering machines; 90 had folding machines.

Many employers, especially in small binderies, discussed the use of machinery and gave their reasons for not introducing it. "The machine changes all the time," said one, who specialized in one process only,—numbering checks, bonds, insurance policies, etc. "I can't risk the capital for a machine which might change soon again. I'd rather stick to one line. Then I can give out other processes to another binder and make one or two cents on the thousand without any risk. That's why so many binderies give out their work. The machines change so fast. I get most of my orders from other binders."

Another employer said that he had paid $1,600 for a folding machine but that it was very seldom used. The girls in the bindery all could fold by hand, and he preferred to give the work to

* Includes folding, sewing, wire-stitching, gathering, numbering machines, etc.

them when they had nothing else to do. "I have a girl coming on Monday to do hand sewing," said another. "We have no sewing machine. I had an order recently which required the sewing machine but I could give that part of the work to another bindery."

One bookbinder said that he would prefer to use a gathering machine since it would be cheaper than hand work, but that it would fill half the workroom and he could not afford the space for it. Another said that it would not pay to have a gathering machine, because there would not be enough work for it. Still another, who specialized in small orders for blankbooks, said that his work was chiefly in lots of 1,000 or 2,000, and that the gauge of the machine would have to be changed too often to make its use practicable. Nor would there be enough work to keep the machine in operation all day. Another bindery had no machinery for gathering, inserting, or covering. The foreman said that "it paid better to give this work to a bindery which had the machines."

Another employer had not bought a pasting machine because it was "not yet practicable for anything but small work." The reason given in one bindery for having no gathering machine was that it was "adapted only for long runs," such as large issues of magazines. Finally, in one of the largest establishments a magazine is still gathered by hand because, it was said, the numerous plates in the periodical divide it into more sections

than there are boxes in the ordinary gathering machine. This defect, obviously, would soon be remedied and the machine installed. Of the 28 gatherers, "five or six of the best would be retained"; the others would be laid off.

In some binderies, of course, the newest machines are purchased as soon as they are placed on the market. Their owners have pointed out the results: more systematic organization of the work, specialization both in the line of work done by the bindery, and in the processes assigned to each employe; and sometimes a decrease in the force of women employed.

"The machines have cut our force in half," said one employer. "Seven or eight years ago we employed 60 or 70 girls. Now we have 30 with just as large an output." "Last year we had 70 or 80 girls. We bought some machines and now we have 30 or 40," said a forewoman. This sounds like a contradiction of the census figures showing increase in the size of establishments measured by number of employes. As a matter of fact, both the workers' impression of unemployment as the result of introducing new machines, and the census facts about growth in numbers following after any improvement in mechanical methods, are true. Unemployment comes first and growth later, and changing processes result in a change in personnel in the workroom. These changing processes might often pave the way for a possible improvement in conditions of employment if more atten-

tion were given to the workers' problems during the transitional period.

One of the most definitely organized workrooms in New York is owned by a man whose policy is always to use the newest inventions. "If you were to tell him there was a new machine on the market," said his foreman, "he'd get rid of one he bought a month ago, and put it in." Twelve girls are employed, and a definite wage is paid for each process. One girl is employed to feed the drop-roll folding machines; four girls take the sheets from the automatic folder and jog them straight, ready for gathering; one fills the boxes of the gathering machine, to which a wire-stitcher is attached; one takes the completed books from the covering machine, which is operated by a man; and five are employed to wrap the copies for mailing.

In another bindery, where magazines and cheap paper-covered novels are bound, the use of machines is largely due to the enterprise of the superintendent. Two years ago a great deal of the work was done by hand. The superintendent made an offer to the firm to lease the bindery from them on a fifteen years' contract, buy machinery, and do their binding at a lower rate than it had cost with the system of hand work. Members of the firm were interested and decided to buy several machines, which the superintendent said had paid for themselves within six months. Following the introduction of machines, a defi-

nite minimum rate per hour was attached to each process except wire-stitching and a small remnant of hand gathering.

The way in which machinery breaks up a trade into establishments which make a specialty of one branch of work, has been noted. The other form of specialization is illustrated in the case of employes who practice only one process in the workroom. This sort of specialization does not seem to be unavoidable. In the bindery described in the preceding paragraph, "all round" workers are in demand, and those who can turn from one process to another are not laid off so often as those who know only one process. But, however great may be the demand for employes experienced in more than one line of work, it is the tendency of machinery to force a worker to practice only one. If a girl is a "piece worker," to lose practice means to lose wages. On the other hand, the machine will not yield its maximum profit unless it is kept in constant operation. Thus, while general practice in all branches of the trade brings to the worker a very desirable power of adjustment to changing conditions, nevertheless, the employer's wish to keep his machines in motion, and the piece workers' eagerness not to lose the speed which comes from constant practice, both tend to organize the bindery force into separate departments, whose workers are not interchangeable. The same demand of the machine, that it be fed with enough work to keep it in constant motion,

forces the employer either to specialize in one department, or to secure more orders and to enlarge his establishment.

It is obvious that the larger the establishment, the more successful will be the attempt to keep every machine in motion throughout the working day. "Establishments are now so large that a woman learns only one process," said one superintendent. "For example, she becomes a sewer and does nothing but that." In the light of this fact, the census figures* are significant: New York state had only six more binderies in 1905 than in 1900 (304 in 1905, 298 in 1900), an increase of 2 per cent, while the number of wage-earners was increased by 832, or 11.6 per cent. Of the total number of 7,984 wage-earners in 1905, more than half, 4,306, were employed in 26 large establishments. Thus the tendency seems to be to enlarge the establishment, and this may cause more pronounced specialization.

On the other hand, the larger the establishment, the greater the choice of processes for those workers who have had opportunity to learn more than one branch of the trade. It is easier to be transferred from one department to another under the same roof than to seek work elsewhere.

But the workers are not always able to take advantage of such possible transfers, for specialization affects also their ability to turn from one kind of product to another. In a

* See pp. 27, 28.

large bindery in New York several periodicals are bound. A girl employed there complained of the irregularity of her work. "It seems pretty hard," she said, "to have to stay home two days in the week and then have to work so hard the other days." Her irregular employment was due to the different methods of binding the different periodicals. Two weekly magazines are brought to the bindery on Tuesday and must be mailed on Thursday. Hand folders and wire-stitchers are needed to bind them. An engineers' magazine must be bound Tuesday and Friday. The work on this is hand folding, gathering by machine, and sewing by machine, instead of wire-stitching. Another publication is brought from the printer on Friday and issued on Monday. It is folded by machine and wire-stitched. On Friday evening and Saturday there is no work for a hand folder or an operator of the sewing machine. Wednesday is the busiest day in the bindery. Two magazines must be completed for the mailers on Thursday. Overtime is usual on that day. This girl could fold by hand, fill the gathering machine, and operate the sewing machine. She worked from Tuesday to Friday. She reported that at hand folding she could earn 75 cents or $1.00 a day. For filling the gathering machine the rate was 18 cents an hour, or $1.53 a day. But neither of these processes lasted six days in the week so that her earnings during the previous three weeks had been $3.19, $7.75, and $3.21. If she had been

steadily employed she could have earned from $5.00 to $8.00 a week as a hand folder, or $9.09 for filling the gathering machine. Had she understood machine folding or wire-stitching she might have worked every day. Not lack of work to be done, but inability to turn from one process to another was responsible for the irregular employment of the specialized workers in this bindery.

Moreover, when different kinds of orders demand different processes, the specialist must be prepared to face not only change in machinery, but change in the size or character of her employer's orders. Recently a magazine which had been gathered by machine was enlarged by doubling the size of its pages. Thereafter a force of inserters was employed and there was no work for gatherers. In another bindery a girl who had been employed to operate the sewing machine in the book department was transferred to the magazine department where her work was to look over sheets folded by machine and to fill the boxes of the gathering machine. Her pay was reduced from $10 to a wage varying from $5.00 to $7.00, according to the kind of work assigned to her. This transfer from work on one product to another requiring different processes was due to the fact that much of the book work formerly done by this firm depended upon orders from a large publishing house which had recently organized its own bindery.

If we trace the history of the folding or the

gathering machine we find that with the development of automatic feeding devices the tendency is to dispense with the work of women and to employ men merely to care for the machines. This change is not a displacement of women workers by men, but a reorganization of the force due to the substitution of rubber fingers, or other automatic feeders, for women workers.

What then is the meaning of the census figures cited in the last chapter, which tell us that in 1870, 30 per cent of the bookbinders were women and 70 per cent were men, while in 1900, 51.6 per cent were women and 48.4 per cent were men? This rapid shifting of the relative proportion of men and women would lead the statistician to suppose that in this trade was to be found a perfect example of the displacement of men by women. Behind the figures one seems to read the story of a struggle in which men have been losers. Yet the comments of workers and employers, and the conditions observed in binderies, contradict this conclusion. Evidently more facts are needed to throw light on the census figures.

In the absence of any data as to the number of men and women employed in different branches of the trade in 1870 and in 1900, the answer must be, in part, merely hypothetical. Judging by the present tendencies in the trade, the cause of the change in the proportion of men and women would appear to be two-fold. It has been pointed out that the share of women in hand binding is rela-

tively small, that they do only the folding, gathering, and sewing, and that the numerous processes of forwarding and finishing have been usually in the hands of men. Hence, in the early days of the trade when hand binderies predominated, men were in the majority. In the development of the industry, two important changes took place. With the introduction of machinery many processes of forwarding and finishing were omitted, while others were combined in one simple operation, thus lessening the relative number of men needed in edition binderies. At the same time, the greatly increased production of pamphlets which need only be folded, gathered, stitched, and covered, enlarged the demand for the processes always done by women. Thus it would appear that without any shifting of the line between men's work and women's work, the proportion of women steadily increased between 1870 and 1900.

If during the three decades between 1870 and 1900 there was a struggle between men and women, with a transfer of processes to women, it seems to have left no trace on present trade conditions. We found instances of this kind of transfer so scattered as to seem to be the exceptions to prove the rule. One girl, who had learned the trade in a small bindery, had had practice in almost every process of men's work. Finally, however, she learned gold laying, and confined herself to that branch of the trade. Another girl, employed in an edition bindery, "sets up" several folding

machines; in other binderies the same work is done by men. One girl cut leather corners for blankbooks; when she was laid off she could not find work because in other establishments boys are employed for this process. A forewoman in a bindery told of a man and his daughter who had worked together "casing-in" books, a process usually done by men. "They made good money," she said, "but now the union is strong enough to keep the women out." One girl had been employed to "pinch" books and to use the round cornering machine. These things are usually done by men, but the establishment was small when she began, and girls did some of the men's work. Another girl described with some amusement the way in which she had pasted canvas on boards at 30 cents per hundred, taking the work from a man who had been earning a rate of 40 cents. In one large edition bindery a woman cares for some of the machines with the skill of a trained machinist.

But these are exceptional cases. The possibility of carrying on more processes than at present fall to their share in the trade does not appear to be a burning question among the majority of women. "The women would just say, 'That's men's work,'" replied one employer, when asked the attitude of his women employes regarding an extension of their opportunities. One girl, who had fed a ruling machine, a task requiring no skill, was asked if she had ever wished to learn to operate

the machine. "Oh, no," she said, "ruling is gentlemen's work. There are no lady rulers. The gentlemen have their hands in the ink pot all day, and no lady wants to get her hands inked like that." "A woman can learn to feed the ruling machine in a day," another explained. "She doesn't need to bother with managing it." "The smell of the glue is awful," said another, speaking of covering books. "It's a man's work." Still another, describing a machine which could fold, gather, and insert, said, "It's a man's work," although each of these processes formerly had belonged to women.

Nor do employers appear to have given much thought to the question. One, an art binder, said that the work of women was restricted only by the men's trade union, and that women were capable of doing men's work. He added, however, that a woman would find it difficult to work fast enough to make her employment profitable in processes commonly done by men. Another, the superintendent of an edition bindery, said that the tasks of women were restricted by their lack of capacity, not by the rule of any organization; they would not have strength to handle the machines which the men operate. Another, a job binder, asserted that he employed women for temporary work only, because they were not strong enough to lift books and "be generally useful." "If you employ a woman, you can't give her anything but sewing," said another job binder, "while

Press and Plow Machine
(The primitive way of plowing or cutting)

Trimming Magazines
(The new method)

a man can turn his hand to other things." On the contrary, the superintendent of a magazine bindery declared that there was no process in his workroom which could not be done by women. "I could put a girl to work operating the cutting machine," he said, "if I paid her $18 a week. I know two big binderies where women are operating the gathering machines and earning $18 a week. I could have a woman tend the large folding machine if I paid her the same as the union scale for men. I don't know why I don't, except that I see no good reason why I should."

In the course of the inquiry, instances of the transfer of women's work to men or boys were found to be more numerous than the reverse. Men were at work operating folding machines and sewing machines, feeding the ruling machine, and folding and sewing by hand. Boys were found emptying the boxes of the folding machine, sewing by hand, cleaning off the books after they had been stamped, and operating the wire-stitching machines. The development of automatic feeding devices for the folding machine and the invention of gathering machines and covering machines have caused these processes also to be transferred to men in many binderies. Indeed, the census of 1905 showed that, in New York City, in the five years since 1900,* the number of bindery women had not increased so rapidly as the number of men, and

*Compare Twelfth United States Census, 1900. Manufactures, Part II, p. 621, and United States Census, 1905, Manufactures, Part II, p. 770.

that although women still outnumbered men they were losing ground. A woman who had fed a point folding machine, and lost her position because of the introduction of the "automatic" tended by a man, remarked, "A man is paid according to what he knows, and not according to what he does." It is certainly true that the tender of a large complex machine, fitted with all the devices for feeding itself, must be one who knows rather than one who does. Women without mechanical training have small chance of securing the work of managing the new machines.

In view of the changes that have been described, the future of women's work in binderies is problematical. It is the opinion of some binders that women could be trained to carry on artistic hand binding in all its departments, but it seems unlikely that the best opportunities in art binding would be open at first to any but women of the professional type. In machine binderies, it would seem to be largely the lack of opportunity to acquire mechanical skill which prevents women from adjusting themselves to new inventions and retaining their former place in the trade. Nevertheless, the changes are much less rapid or revolutionary than some of the remarks of workers and employers would indicate, and the hardships of the workers could be avoided if more attention were paid to their problems. Machines have appropriated more processes in magazine binderies than in any other branch of the

trade, but even in establishments where the newest inventions are found women workers are still needed, although often they are not the same women who formerly worked there. The processes have changed, and the personnel of the force usually changes also with the reorganization of the work. But in spite of the tendencies revealed by such occurrences a view of the trade as a whole indicates that the number of women employed in the industry will probably continue to increase.

CHAPTER IV

WAGES AND HOME CONDITIONS

OF all the complex factors to be considered in describing a trade, the most vital is the relation of the wage scale to the maintenance of wholesome living conditions among the workers. To discuss women's wages merely as a phase of trade problems, unrelated to the life of the worker outside the workroom, is to miss the real significance of the conditions of their work. For this reason, two important subjects, wages and home conditions, are brought together for discussion in this chapter.

Many difficulties are encountered in investigating wages. The private investigator, without access to payrolls, is handicapped in securing facts from employers. Variations in methods in different establishments, and changes from day to day in the same workroom, are obstacles in the way of getting clear-cut, definite information. "We have no fixed wage scale; it all depends on the girl," is a remark heard frequently when employers are asked what wages are actually received by women employes. "Some girls can make 50 cents and others $2.50 a day. There is no uniformity."

The method of paying by the piece rather than by a fixed weekly rate also obscures the real facts. The crowding of work at one season, and employment only for part time, or no work at all, at another season, produces great confusion in estimating the bindery girl's income.

For these reasons general statements about the range of pay in a given establishment have not proved so dependable a source of information as the case study of the workers interviewed. The records of these workers show the length of their employment in bookbinding, and the weekly wage received in each place of employment, including the first wage, the last, and the maximum. If they were piece workers the range of their earnings is recorded.

The three methods of payment found in binderies are called, in the trade vocabulary, piece work, time work, and week work. Piece workers are given jobs on which a certain price per 100 sheets has been set; the number produced determines the earnings. Time workers are paid by the hour, at a different rate for different processes. A girl may be a piece worker during part of the day and then become a time worker. Week workers receive a regular wage by the week, which does not vary with variations in the amount produced. Obviously, however, no week worker could retain her place without producing a satisfactory minimum output.

The processes of work and the size of the estab-

lishment seem to be the most important factors in determining the method of payment. When a worker turns frequently from one process to another, or when the same process is applied to many different kinds of products, then the piece work method is not convenient. "We have to pay numberers by the week," said one employer; "piece work would keep a bookkeeper busy calculating the rate and pay for each job." "My girls are all week workers," said the owner of a small establishment. "They can't make anything on piece work unless there's plenty of one kind." Job binderies, therefore, handling books of all sorts and varieties, singly or in small numbers, usually adopt the time or week methods of payment; so also do employers of small forces of general workers. But for binders of large editions of books handled by the thousands, all identical, the piece work system affords an accurate test of each worker's earning power. The firm thus avoids payment for work not done. As time and week workers' wages are usually lower than the maximum possible earning of piece workers, many bindery women prefer the piece-work system.

The workers interviewed were asked what wage they had last received in the bookbinding trade, and their answers, classified in Table 6 according to length of experience, show the bindery girl's chances for increase in earnings. Of the workers considered, 133 were paid by the week or time, and 60 were piece workers.

TABLE 6.—WEEKLY WAGES OF WOMEN EMPLOYED IN BOOKBINDING BY YEARS OF EMPLOYMENT IN THE TRADE[a]

Weekly Wages	Women Who have been Employed in Bookbinding					Total	
	Less than 1 Year	*1 Year and Less than 3 Years*	*3 Years and Less than 5 Years*	*5 Years and Less than 10 Years*	*10 years or More*	*Number*	*Per Cent*
Under $5.00 . .	26	10	1	1	..	38	19.7
$5.00 and under $6.00	5	12	4	1	..	22	11.4
$6.00 and under $7.00	3	11	6	1	1	22	11.4
$7.00 and under $8.00	..	10	5	7	1	23	11 9
$8.00 and under $9.00	..	8	8	10	3	29	15.0
$9.00 and under $10.00	..	2	5	9	2	18	9.3
$10.00 and under $12.00	..	2	7	18	6	33	17.1
$12.00 and under $15.00	..	..	..	1	7	8	4.2
Total . . .	34	55	36	48	20	193	100.0
Average weekly wages	$4.30	$6.18	$7.71	$8.81	$10.30	$7.22	..

[a] Of the 201 women interviewed, 8 did not supply information.

More than half of these workers received less than $8.00 a week. Only 21 per cent, or about one in five, received $10 or more. Measured by average wages, the group who have been employed three or four years earn only about $3.00 more than those who have been at work less than a year. The average wage of the group employed between five and ten years is $8.81, only about a dollar more than for those who have had three to five years' experience. For those who have worked

in binderies ten years or more, the average is $10.30, with $15 as an upper limit.

As to the wage received within the first year, additional evidence is secured by tabulating all these workers' reports of the first wages received when they entered the bookbinding trade, as shown in Table 7.

TABLE 7.—WEEKLY EARNINGS OF WOMEN EMPLOYED IN BOOKBINDING DURING FIRST WEEK OF EMPLOYMENT IN BOOKBINDING[a]

Earnings During the First Week	Women whose Earnings were as Specified	
	Number	*Per Cent*
Nothing	4	2.1
Under $3.00	23	11.9
$3.00 and under $4.00	58	30.0
$4.00 and under $5.00	70	36.3
$5.00 and under $6.00	20	10.4
$6.00 and under $7.00	17	8.8
$7.00 or over	1	.5
Total	193	100.0

[a] Of the 201 women interviewed, 8 did not supply information. The week workers numbered 180 and the piece workers 13 of those reporting on this point.

Nearly half, 44 per cent, of these learners in binderies received less than $4.00. Four-fifths received less than $5.00 a week. Of the group of four who received no wages, one learned eight years ago, and the others twelve, fifteen, or forty years ago, at a time when the custom of not paying learners was more general than at present.

We know of no bindery where this custom now prevails.

The group of 18, or 9 per cent, who earned $6.00 or over the first week, ought to be more fully described. Only one was as young as fourteen when she began work in the bookbinding trade. Six were fifteen years old, six were seventeen, two were nineteen, and three were over twenty-one. These older girls had had experience in other occupations. On entering the bookbinding trade seven worked in magazine binderies, doing unskilled work, in which strength is the chief requirement; three were employed for temporary work, folding a holiday pamphlet; two were exceptions who secured work in hand binderies through influential friends; two did heavy work in edition binderies; one was a gold layer's apprentice; and three folded pamphlets. A comparatively high wage paid to inexperienced girls usually means that the process demands no skill, and no real opportunity will be given to learn or to advance.

Of 210 employers interviewed regarding learners, 65 refused to engage them, and three made no statement on this point. Table 8 shows the wages paid to learners, as stated by 133 of the 142 firms willing to employ them, classified according to the minimum age requirement in the bindery.

In 34 of the 60 binderies in which fourteen-year-old girls were employed as learners, the beginning wage was less than $4.00. Of the 52 in which learners must be at least sixteen, only 14

pay a minimum wage of less than $4.00, and 38 pay $4.00 or more. This indicates the superior earning capacity of the sixteen-year-old girl in this trade, even though she be a learner, and gives statistical support to the remark of an experienced worker: "It's the young girls who spoil a trade. They come in and work for very low wages, and sometimes the boss takes them in preference to the older girls, who can't work for so little." An analysis of wages paid to learners in different branches of the trade shows that edition and pamphlet binderies pay higher wages to learners than they receive in blankbook binderies.

TABLE 8.—BINDERIES EMPLOYING WOMEN AS LEARNERS BY WEEKLY WAGES OF LEARNERS, AND THE MINIMUM AGE AT WHICH THEY ARE EMPLOYED[a]

Minimum Age at which Learners are Employed	Binderies in which the Weekly Wages of Learners are				*All Binderies*
	$2.00 and Less than $3.00	*$3.00 and Less than $4.00*	*$4.00 and Less than $5.00*	*$5.00 and Less than $7.00*	
Minimum age 14 years .	3	31	24	2	60
Minimum age 16 years .	1	13	22	16	52
Minimum age not stated	..	8	10	3	21
Total . . .	4	52	56	21	133

[a] Of 142 binderies employing learners, 9 did not supply information as to wages of learners.

The wages received by the group of workers interviewed (see Table 6) may be compared with

the census statistics of 1905 based on payroll transcriptions of the earnings of 2,010 bindery women in New York state. The census figures also afford a basis for comparison of the wages of men and women in this industry. Furthermore, they show the comparative wages received by bindery women and by the large group of women in all manufacturing industries.

TABLE 9.—COMPARATIVE WEEKLY EARNINGS OF MEN AND WOMEN EMPLOYED IN BOOKBINDING AND OF WOMEN IN ALL MANUFACTURING INDUSTRIES. NEW YORK STATE, 1905[a]

Weekly Earnings of Employes	Bookbinding Trade		Women in all Manufacturing Industries
	Men	*Women*	
Number considered	*2,143*	*2,010*	*108,083*
Per cent earning—			
Less than $3.00	0.9	3.5	6.5
$3.00 and under $4.00	3.1	16.1	10.1
$4.00 and under $5.00	5.5	17.8	15.0
$5.00 and under $6.00	6.0	16.3	15.5
$6.00 and under $7.00	7.4	14.4	14.7
$7.00 and under $8.00	5.7	10.5	11.4
$8.00 and under $9.00	7.3	8.0	8.5
$9.00 and under $10.00	7.6	5.8	6.4
$10.00 and under $12.00	12.9	4.8	6.4
$12.00 and under $15.00	15.0	2.1	3.7
$15.00 or over	28.6	0.7	1.8
Total	100.0	100.0	100.0
Average weekly earnings	$12.09	$6.13	$6.54

[a] United States Census, Bulletin 93, Earnings of Wage-earners, Manufactures, p. 150. 1905.

According to this table, nearly 70 per cent of women bookbinders received less than $7.00 in a

week when the largest number were employed, the time for which census enumerators were instructed to copy the payrolls. Only 7.6 per cent, or about one in 14, received $10 or more. Compared with this information, the facts about the women whom we interviewed show that they have a higher earning capacity than the larger group recorded in the census. This may be explained as due in part to the fact that the census figures include bookbinders outside New York City in other parts of the state where both wages and cost of living are lower. Furthermore, the census shows actual earnings in the week under consideration, not wage rates, and some workers may have been counted who had not worked six days. Nevertheless, as it was a week when the largest force was at work, the probability is that the great majority were employed full time, and it is fair to compare their earnings with the wages received by our group in a normal week. The difference may be due in part also to the fact that the group of girls who gave us most complete information may have been above the average in intelligence, length of experience, and earning capacity. It is obvious, at least, that our data concern women who are certainly not below the level of their fellow-workers, and their experiences cannot be challenged as giving an unfair view of women's work in the trade.

According to the census figures, the earnings of women in binderies are lower than those of women in all manufacturing industries, grouped

together, in New York state. The average for all industries is $6.54 compared with an average of $6.13 for women bookbinders, and the chances of earning $10 or more are fewer for bindery women than for women in all trades taken together.

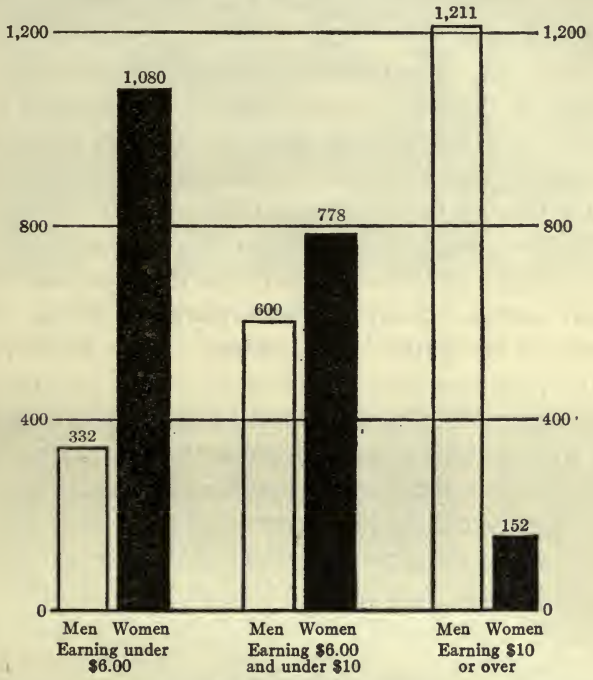


CHART III.—MEN AND WOMEN EMPLOYED IN BOOKBINDING IN NEW YORK STATE, BY WEEKLY EARNINGS

The difference between the earnings of men and women in binderies is pictured graphically in the accompanying chart. Of the women, 54 per cent earn less than $6.00 a week, while only 16 per cent

of the men receive such low pay. On the other hand, only 8 of every 100 women reach a wage of $10 or more, as compared with 57 of every 100 men. The women are not doing the same work, but it is significant that the standard of remuneration in their departments is about half the standard for men's work.

These group figures do not take account of differences in different establishments, of changes in rates, of deductions by fines, or of losses through irregular employment. In making comparisons of rates of pay in different establishments, possible differences in grade of work must be carefully noted. It is fair, however, to compare the rate per hour for such comparatively uniform work as filling the boxes of the gathering machine. Some binderies pay 15 cents an hour for this work, some 17½ cents, and some 18 cents. A difference of 3 cents an hour in a forty-eight-hour week amounts to $1.44, not a small sum in the eyes of a low-paid worker. Information given both by workers and employers indicates also a difference of 50 per cent in the rate for hand folding in different binderies, one employer paying 1 cent per 100 sheets, folded once, and another paying a cent and a half. One worker who was employed in several binderies in quick succession said that for a large "two-fold" she received 2 cents per 100 in one bindery, and 3 cents per 100 in another, the size and grade of paper being the same. For folding a circular, "four-fold and cut," she received 5½ cents per 100 in one bindery, and

FOLDING BY HAND
(Inner room. All light artificial)

FOLDING AND GATHERING
(Hand folders on platform; machine folders and hand gatherers below)

6½ cents in another. For gathering and collating magazines she said that the rate in one bindery was 1 cent per 100 signatures, and in another three-quarters of a cent.

A girl employed five years in the trade explained one cause of this difference. "Employers often try to get the girls to do a piece of work at less than the regular rate," she said, "and sometimes the girls don't know what the regular rate is. It's a mean thing to do, because when an employer figures on an order he doesn't figure on a reduced rate of pay. He figures on the regular rate and then any reduction he's able to get from the girls adds to his profit. Once our boss gave the girls a job at 18 cents a thousand that the bindery I'd just left had been paying 22 cents for. I told the girls about it and they said they couldn't do the work for less than 22 cents. The boss gave right in. He knew he was putting too low a price on the work." "The mean thing about that shop," said one girl, "is that when they see you're making more than a certain amount, they cut the rate." "I worked very hard," said another, employed in a very different type of bindery, "but I tried to keep to a schedule, because if one girl turns out too much in a day, they're apt to cut the rates."

Wages may also be diminished through fines and charges, although in the bindery trade these are not usually very serious. Various punitive methods are adopted to compel the workers to be prompt in the morning. Time-clocks in many

binderies act as automatic witnesses, and the punishment may be a scolding or a fine. In some binderies, if a girl is one minute late she is "docked" for fifteen minutes, or if she is more than fifteen minutes late she is docked for a half hour. Others have been fined for an hour's absence if late five minutes, or they have been locked out until noon. In some cases the charges exacted indicate a petty meanness which is exasperating to the workers. On what grounds, for example, can an employer be justified in charging his employes 2 cents a month for having the toilets cleaned? In some establishments the girls pay 5 cents every two weeks for ice water in summer. "It's very little," said one girl, "but it's mean of the firm not to supply it. We have to bring our own towels and soap, too."

Very few firms seem to charge for "spoiled work." The penalty is more likely to be loss of position. One learner, however, earning $4.50, had been fined 25 cents for spoiling some sheets; on another occasion she was fined 15 cents. Another case in the same bindery was that of a little girl who had to pay 75 cents for a book she had spoiled.

Most serious of all losses is the cut in yearly income due to lack of work in dull season, or loss of time for other reasons. An accurate determination of yearly earnings is impossible unless the workers keep accounts, but the following estimate, made after very careful consideration of all the facts

on our record cards, throws light on the workers' losses. The whole subject of irregular employment will be more fully discussed in the next chapter.

TABLE 10.—APPROXIMATE YEARLY INCOME OF WOMEN EMPLOYED IN BOOKBINDING, BY AGES[a]

Yearly Income	*Women Under 18 Years*	*Women 18 Years and Under 21*	*Women 21 Years or Over*	*All Women*
Under $100	2	1	4	7
$100 and under $200	8	4	1	13
$200 and under $300	7	13	1	21
$300 and under $400	5	16	6	27
$400 and under $500	..	4	13	17
$500 and under $600	..	4	2	6
$600 and under $800	..	1	..	1
Total	22	43	27	92
Median income	$207	$325	$400	$308

[a] Data are presented only for women who have been wage-earners a year or more. In making up the table, earnings from all occupations engaged in during the year have been considered, since many bookbinders are forced to seek work outside their trade when bindery work is slack.

These figures are estimates rather than exact records. The table shows, however, the median yearly income, half the workers earning less and half earning more. A closer analysis of the figures on which the table is based shows that for girls under eighteen the median is $207, for girls of eighteen to twenty-one years, $325, for those twenty-one years of age or over, $400, and, for the whole group considered, $308. If work were steady the average weekly wage of $7.22, which

is recorded for the girls interviewed, would amount to a yearly income of about $375. But the estimate of yearly earnings shows that even though bindery girls find other work in dull season the median yearly income from all their occupations is about $308, indicating a loss of more than $50 in twelve months. This is not a small loss when the fact is realized that very few bindery girls earn $500 or more in a year.

Surprising, indeed, is the complacency with which many persons regard the low wages of working women. They believe that the problem concerns only the welfare of the individual girl, and that if she can live at home, merely supplementing the family income, her scanty earnings need cause no concern. Such easy-going thinking ignores the fact that the low standard of remuneration of the large proportion of the community's workers which women now represent must inevitably lower the industrial standards of the whole community. Nor does it occur to them that the low wages of women are a prime cause of poverty, preventing wholesome and decent living in thousands of families which depend wholly or in part upon women's earnings.

The girl who lives at home is typical of an overwhelming majority of bindery girls. Even a cursory description of these family groups shows how important is the gainful employment of women in its relation to the maintenance of the household.

TABLE 11.—FAMILY STATUS OF WOMEN EMPLOYED IN BOOKBINDING[a]

Status	Women Whose Status is as Specified	
	Number	*Per Cent*
Living at home—		
As head of family	1	.5
With father as head of family	107	55.4
With mother as head of family[b]	59	30.6
With husband as head of family	3	1.6
Other relative as head of family	23	11.9
Total living at home	193	100.0
Boarding	6	
Grand total	199	

[a] Of 201 women interviewed, 2 did not supply information.
[b] Father dead or away from home.

Thus 193 of the 199 bindery girls here considered lived at home, but in only 55 per cent of the families was the father the head, while in 30 per cent the father was dead or away from home and the direction of the household devolved upon the mother. In 12 per cent the bindery girl lived with some other relative and in three cases she was a wife, not only managing her own home, but contributing to it her weekly wages. Only six were boarding alone away from any relatives.* Even when the father is nominally the head of the household,† he is not always contributing to the family

* The census shows a slightly larger percentage of boarders, 8 per cent. Twelfth United States Census, 1900. Special Reports, Statistics of Women at Work, pp. 266, 270.

† In our interviews with bindery women, we emphasized especially the subject of trade conditions. Information about living conditions was not secured in every case, but the number of families investigated on this point constituted a large majority of the households of the bindery girls interviewed. They numbered 120 households in which were found 150 women bookbinders. The data in the following pages concern primarily these 120 households.

support. In 48 families the father was dead, in seven he was not living at home, because of illness or because he had deserted the household, while in five he was at home and was regarded as the head of the family, although illness or age prevented his working. In only half the households of the bindery women interviewed was the father a contributor.

The occupations of the fathers who were at work represented a great variety of employment. Four had their own business,—one of these was a barber, one a shoemaker, and two were peddlers. The largest group, 53, were not "independent" workers but wage-earners, including printers, machinists, builders, tailors, bookbinders, workers in a spring factory, a painter, brass worker, electrician, last maker, glass setter, bronze worker, copper worker, hardware worker, ship builder, pipe layer, piano worker, silk weaver, presser, candy maker, and a packer of meats. In addition to these workers in factories and mechanical pursuits, this wage-earning group also included drivers and coachmen, watchmen, lumber yard workers, janitors, longshoremen, day laborers, a waiter, motorman, switchman, public bath attendant, stableman, butcher, baker, and a bookkeeper. The variety of occupations represented is the most noteworthy feature of the list. It includes skilled and unskilled, responsible and unimportant, permanent and casual. The increasing importance of the work of women in wage-earners' families is

not confined to any one group of occupations of the traditional heads of households.

Information about wages of fathers was secured in comparatively few cases, but such facts as were learned are interesting as illustrations. The best paid worked in connection with the public baths at $21 a week. A machinist earned $16. A weekly wage of $15 was reported by two drivers, a switchman on a street railway, a hardware worker, and an electrician. Two other drivers and a bindery worker were in the $12 group. A longshoreman received $11 and a worker in a bronze factory $10. If $900 be the minimum living income for a "normal" family of husband, wife, and three or four young children in New York,* then only one of these men was earning a living sufficient to support such a household. But in his case the family was larger than this normal standard and his daughter's wages in a bindery were needed. These are but illustrations, but they corroborate the statements made in many other families as to the necessity for the contributions of the women to the support of the households.

Nearly all the 120 households depended upon the earnings of more than one worker. In only one family was the woman bookbinder the only wage-earner. In 84 households the family income was secured by the combined contributions

*Chapin, Robert Coit: The Standard of Living among Workingmen's Families in New York City, p. 246. Russell Sage Foundation Publication. New York, Charities Publication Committee, 1909.

of at least three workers, and of these, 29 families had four wage-earners, 10 had five, and one had as many as six. The record cards reveal the fact that 33 households had no men wage-earners, but depended entirely on women. The men contributors numbered three in three households, and two in 33, while one man was at work in each of 51 families. The women wage-earners numbered one in each of 32 families, two in 55, three in 25, and in eight households groups of as many as four women workers were contributing.

In one of the families two bindery girls support themselves and their mother, who is an invalid. Formerly they worked in the same establishment, and both were frequently laid off at the same time. It was too serious to risk having all the family income cut off in that way, and they changed their positions, believing that if they were working in different binderies they would not both be unemployed in the same weeks of the year. One is a general worker earning $8.00 a week. The other is an assistant forewoman receiving a wage of $9.00. "Very few week workers get more than $9.00 in bindery work," the latter said. As a gatherer, paid by the piece, she has earned as much as $13, but both she and her sister say that they prefer smaller pay and steadier work. Piece workers, they think, are more liable to be laid off in slack season.

The same preference for "smaller pay and steadier work" was expressed by the mother of a girl

who knocks up in an edition bindery, earning $5.00 a week. "She pays the rent and more," said the mother. "She supports the family. The father earns very little, only the food. I don't want her to be a piece worker. You order things, and then there's no work and you can't pay for them. I'd rather she should have small pay steady."

One of the most significant facts learned in these visits to the households of bindery women, was the revelation that it was not only the young daughters who had gone out to work pending the founding of their own homes, but that these groups of women wage-earners, who were contributing to the family support, included also the mothers. In more than a third of the families it was necessary for the mother not only to do her duty as household manager but also to earn money by working at home or in factories. Nor is this necessity present only in families in which the father is not living. For example, in a Bohemian family of six, father, mother, and four children, the mother is a cigar maker, and the oldest daughter, aged sixteen, and her sister, aged fifteen, are bookbinders, one earning $3.50 and the other $4.00 a week. Two younger boys are in school. The father is a polisher in the hardware trade, earning $15 a week. "The work is pretty steady," said his wife, "but you know yourself a man can't support a family of six on $15 a week." She earns $14 a week working in a factory so near home that she can

get lunch for the youngest children. She also does most of the family sewing. She hires a woman to do the washing, and the two girls iron the clothes in the evenings. The family spends $1.80 a week on carfare. The mother says that every month she thinks that in a few weeks she will not have to work in the factory any longer, but after the $16 is paid for the rent, and additional sums for the insurance, and the trade union dues, and the lodge money, there are still so many things that the family needs that she feels bound to continue.

A gold layer, earning $10 a week, is a married woman, whose husband has been too ill to work for two years. They live in one furnished room, having been forced to give up their flat and sell their furniture when the husband could no longer work. Occasionally they go out for their meals, but more often the wife cooks on a gas stove in their room. She was interviewed in April, 1911. She had been laid off two weeks the preceding summer, and for the preceding four months the bindery had given the gold layers only five or five and a half days' work in the week. "I haven't made a full week's pay since January," she said.

The pressure of the high cost of living, or the illness or death of the head of the family, has in many other cases compelled the wife to earn money to help support the household. The wage-earning mothers in the 120 families studied numbered 45, while in 66 households the mothers'

Covering Magazines by Machine

Gathering Machine

contribution was through housework at home rather than through paid employment. In eight families the mother was dead, and in one she was not living at home. Of the 45 who contributed to the family income, 14 did so by keeping boarders or lodgers, seven by janitor service to pay the rent, and two by factory work at home, one sewing and the other preparing hair goods; several of them combined more than one of these means of livelihood. There were 31 who worked for wages outside the home, one as cook in a private family, one in the laundry of a hospital, 18 at day's work, washing, or cleaning, or as housekeepers or office cleaners, and 11 in factory work including bookbinding, dressmaking, cigar making, rubber manufacture, the packing of groceries, and the making of paper boxes.

One of these working mothers is only seventeen years old. Her husband is in prison. She and her seven weeks' old baby live with her mother and young sister in one room on the top floor of a dreary tenement in Cherry Street. The sister has just gotten work as a learner in bookbinding at $4.00 a week. The young mother's earnings are $6.00 a week. After her hard and dusty day's work in the bindery she returns home to nurse her baby.

In one family, the mother, who is a widow, and three daughters are all wage-earners. The mother and one daughter work in paper box factories, and the other two in binderies. The mother says

that she has always worked in the paper box trade. "It used to be a good trade, but machinery has spoiled it. I used to make $10 a week easily, but now we're lucky if we make $1.25 a day." Every member of the family faces the uncertainty of slack season, but employment in different factories lessens the risk of simultaneous reductions in income. When the working day in the factories is over, they return home to cook dinner, wash the dishes, clean the three rooms of their flat, and do their washing. "It's hard to work all day for $4.50 a week and then wash your clothes at night," said a bindery girl in another household.

Often it seems as though the work open to married women or widows was the hardest and most poorly paid of all the tasks done by wage-earning women. Because of their household duties they are less free than their daughters to choose their occupation. One woman, who has two daughters in the bookbinding trade, fifteen years ago was left a widow with four children. During those fifteen years she has worked as an ironer in the laundry of a New York hospital, and has never had a day off with pay since she has been employed there. All day long she stands at her work until now she wonders whether the section of the floor upon which she has stood so long will not wear through to the ceiling below. The hours, however, are shorter than in many factories, and so she endures the hardships of her work. Her children are now grown, so her employment away from home all day does not

endanger their welfare as it did when they were younger. Even now, however, it is difficult to get the housework done. The only time for it is before seven in the morning or after six at night.

The fact that the mothers must be wage-earners in occupations which take them away from home is more serious when there are children in the family. That bookbinders' households are not groups of adults, but that they have little brothers and sisters whom they are helping to support, is shown by facts about the number of children under fourteen. In more than three-fifths of the families there are children under fourteen, and in more than a fourth these young children number three or more. That in many of these households in which the children are not yet past school age not only young girls but their mothers must share in earning the necessary income, is an indication of a problem of increasing importance in the community.

No attempt was made in this investigation to study the standard of living as it would be revealed in the expenditures for food, clothing, recreation, education, and other important items of the family budget. But data about the amount spent in rent and the number of rooms compared with the number of persons in the household are tangible indications of the economic status of the families of bindery girls.

These data show a rather wide range of expendi-

ture for rent, with six families paying less than $10 a month, and five paying $25 or more. The greater number are included in the groups having a monthly rent bill of $14 to $20. That bookbinding is an urban industry, and that not only in New York but in other sections of the country bindery girls' homes are, therefore, subject to the congested conditions and high rents of city life, is proved by the census figures already quoted* showing that, of all women employed in binderies in the United States, 82.2 per cent live in the larger cities, while only 17.8 per cent are found in small cities and country districts. New York, Chicago, and Philadelphia claim 43.9 per cent or more than two-fifths of all the bindery women in the United States. Although Manhattan has a bindery district where the majority of establishments are located, the trade does not draw its workers from any one section. The homes of the 201 girls interviewed were scattered about the city, 55 below Fourteenth Street, 52 north of it on the east side, and 42 on the west side, three in the Bronx, and 49 in Brooklyn.

As our investigation of binderies was confined to Manhattan we did not seek out bookbinders living in Brooklyn, and therefore these figures probably do not show the full proportion living there. That many bookbinders live in Brooklyn is confirmed by a comparison of the occupational statistics (house-to-house enumeration) and

* See Table 3, p. 31, and Chart II, p. 32.

the manufacturing statistics (factory enumeration) of the census of 1900, showing that of all bindery women in Greater New York 50 per cent live in Brooklyn, and only 5 per cent work there. The fact that the bindery district surrounds the Manhattan end of the Brooklyn Bridge, and that within a two and a half or five-cent carfare zone is a wide choice of flats in Brooklyn, doubtless accounts for the proportion who live there and work in Manhattan.

That every effort is made to economize in rent is indicated by the number of persons to the room in these households, as shown in Table 12. The groups are so arranged as to indicate the number of families, conforming to the generally accepted standard of "less than one and a half persons per room." A larger proportion per room means overcrowding.

TABLE 12.—PERSONS PER ROOM IN FAMILIES OF WOMEN EMPLOYED IN BOOKBINDING[a]

Persons per Room	*Families in Which the Number of Persons per Room is as Specified*
Less than one and one-half persons	63
One and one-half persons and less than two persons	23
Two persons and less than three persons	19
Three persons and less than four persons	3
Four persons	1
Total	109

[a] Of 120 families investigated, 11 did not supply information.

The number of rooms here counted includes not only the bedrooms but the kitchen and any available sitting room space. It would seem that an apartment with only as many rooms as there are members of the family would be abnormally crowded. But even gauged by the much less comfortable standard of one and a half persons per room, 46 of 109 households of bindery girls were crowded to that degree or worse. This is a significant sign of an inadequate standard of living in many of these families. Even the combined efforts of so many wage-earners appear to be insufficient to secure wholesome living conditions.

That the contribution of bindery women toward the maintenance of their homes is not casual but permanent is indicated by the number of years they have been wage-earners.

TABLE 13.—LENGTH OF EMPLOYMENT OF 201 WOMEN EMPLOYED IN BOOKBINDING

Length of Time Employed	Women Employed in Bookbinding who have been Employed each Specified Length of Time			
	In any Occupation		*In Bookbinding*	
	Number	*Per Cent*	*Number*	*Per Cent*
Less than 1 year . .	19	10	35	17
1 year and less than 3 years	39	19	57	29
3 years and less than 5 years	50	25	37	18
5 years and less than 10 years	59	29	49	25
10 years or more . .	34	17	23	11
Total	201	100	201	100

That nearly half, 46 per cent, have been wage-earners five years or more, and that only 10 per cent have been at work less than a year, points to the fact that the earnings of these women have become an indispensable part of the family income.

The ages of the workers give indirect evidence of their length of service. Only 18 of the 200 who stated their ages were under sixteen, 37 were between sixteen and eighteen, 75 between eighteen and twenty-one, 40 between twenty-one and twenty-five, 28 between twenty-five and thirty-five, and two were in the fifties. The census figures regarding the 4,086 bindery women counted in New York in 1900 indicate that 411, or 10 per cent, were under sixteen; 2,440, or 60 per cent, were between sixteen and twenty-five, and 1,235, or 30 per cent, were twenty-five or over.* Thus both the census figures and the data about the group interviewed in this investigation show that the largest group are under twenty-five years of age, 70 per cent according to the census, 85 per cent according to our records. Nevertheless, the proportion continuing to work beyond that age is sufficiently large to warn us against sweeping conclusions about the universally short term of service of wage-earning women.

Data about these girls' mothers have shown that a woman must often continue to work for wages after her marriage. Before marriage, the bookbinders' earnings are of great importance to their

* Twelfth United States Census, 1900. Occupations, p. 640.

families. Practically every bindery girl interviewed gives all her earnings to the family each week, receiving back again the sums needed for carfare, lunches, and incidental expenses. A weekly income of $8.00 a week hardly suffices to support a single person in New York City and is a scanty allowance when part of it must be used to help support children and other dependents in the household. Yet more than 50 per cent of the bindery women are receiving a smaller wage than that amount, and in dull season their income is still further reduced.

CHAPTER V

IRREGULARITY OF EMPLOYMENT

WOMEN in binderies in New York have experienced all sorts and conditions of irregular employment. They know the meaning of general industrial depression, affecting alike all the occupations in the community. They have met the changing demands for books at different seasons of the year. They have tried to adjust themselves to the intermittent employment which characterizes the binding of magazines. They have been forced to learn new operations or to seek other occupations when changes in machinery have resulted in a reorganization of the methods of work.

Nor does there appear to have been any systematic, successful effort either to prevent irregularity of employment or to lessen its evils. In the bookbinding trade, as well as in other occupations, this is one of the most baffling problems of industry. It concerns both men and women. It reduces earnings and lowers the standards of living. It checks the fullest development of efficiency, demoralizing the man or the woman who must meet the problem year after year under conditions so varied that the worker cannot measure with cer-

tainty the evils which the season may bring forth. It disorganizes workrooms and forces employers to engage new hands many times in the course of twelve months. Definite plans have been suggested, and in some cases successfully tried, in the effort to solve other industrial problems. For instance, it is not impossible to show how the working day may be shortened, how the standard wage may be maintained, nor how workers may be trained in skill. But in answer to the questions involved in preventing irregular employment, one can cite only more or less vague theories and no comprehensive or successful experiments.

To measure this irregularity is almost as difficult as to suggest any practical means of preventing it. A worker may be unemployed or underemployed. She may be walking the streets looking for a job. Or she may be a piece worker, sitting idle in the factory and losing the wages which she might be earning if work were at hand. Or she may find another position in another occupation at a lower rate of pay, and in making the change she may lose several working days, in addition to the reduction in her earning power due to the necessity of adjusting herself to new processes. To recall how long she was idle twelve months ago or how much time and money she lost waiting for work in the factory, or how much it cost her to change her occupation is a feat of memory which would be difficult for anyone to accomplish. Nevertheless, the gravity of the problem and the

difficulty of securing full information make it the more important to collect all the data on the subject as they appear in the census and in the records of this investigation.

In New York state in 1905 the census enumerators* recorded 9,233 as the greatest number of bookbinders and blankbook makers (both men and women) employed in 304 establishments during the year. The least number was 6,645, showing a difference of 2,588 for the two periods. In other words, 28 per cent of the maximum force had disappeared from the payroll at the time of minimum employment. The federal census also publishes the figures showing the numbers of men and women employed in each month in 908 bookbinding establishments throughout the United States, but these facts are not given separately for each state or city. They show that the month of minimum employment for men is July, for women, April. The largest numbers of men and women are employed in December.†

The figures in the census can be regarded only as a general index, for in them no account is taken of different seasons in different branches of the trade. As in many occupations, the Christmas

* United States Census, Special Reports, Manufactures, 1905. Part I, United States by Industries, p. 99.

† These are the only reliable, official data which we have found regarding the time lost by bindery women. In 1890 and 1900 an attempt was made to record the length of unemployment of every wage-earner enumerated on the household schedules. The statistics have very little value, because the term "unemployed" was not always clearly understood by the enumerator, nor were the facts accurately reported by the wage-earner or the member of his family who gave information.

rush increases the force of employes or lengthens the working day. Binders of holiday editions of the latest novel, art binders preparing Christmas presents, lithographers binding calendars, and

TABLE 14.—MAXIMUM NUMBER OF WOMEN EMPLOYED IN BOOKBINDING IN MANHATTAN, BY THE SEASON OF GREATEST ACTIVITY OF THE ESTABLISHMENTS IN WHICH THEY ARE EMPLOYED[a]

Season of Greatest Activity of Binderies	Women Employed in Edition, Pamphlet, and Job Binderies				Women Employed in Blank-Book Binderies		Total	
	Which Employ less than 50 Women		*Which Employ 50 or more Women*					
	Number	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
Winter[b] . .	741	41	1,133	35	396	47	2,270	38
Summer . .	15	1	145	4	10	1	170	3
Quarterly . .	28	2	70	2	..	..	98	2
Monthly . .	166	9	470	14	..	..	636	11
"According to orders" . .	431	24	235	7	121	15	787	13
"Steady" . .	417	23	1,215	38	313	37	1,945	33
Total . .	1,798	100	3,268	100	840	100	5,906	100

[a] Of the 5,949 women employed in the 210 establishments investigated, 43 were in establishments which did not supply information.

[b] The period of greatest activity is generally before Christmas.

pamphlet binders issuing holiday advertisements for firms in many other industries, look forward to a harvest of orders beginning in the early autumn. Magazine binders count on larger issues in the three months preceding Christmas. Besides the

busy period occurring annually, magazine binderies have also a monthly or weekly rush preceding the date of issue, followed often by days of unemployment. Spring fashion books, school books, commercial registers, seedsmen's catalogues, and telephone directories have well defined seasons. Thus the census figures cannot show the actual fluctuation of the force in any one branch of the trade during the year, for they are made up of the combined statistics of these various branches, whose rush periods occurring at different times balance each other. The results of our inquiry regarding the period of maximum employment in different types of binderies are shown in Tables 14 and 15.

TABLE 15.—BOOKBINDING ESTABLISHMENTS IN MANHATTAN, BY SEASON OF GREATEST ACTIVITY[a]

Season of Greatest Activity of Binderies	Number of Edition, Pamphlet, and Job Binderies		Number of Blank-Book Binderies	Total	
	Employing less than 50 Women	*Employing 50 or more Women*		*Number*	*Per Cent*
Winter[b]	37	13	20	70	34
Summer	1	2	2	5	3
Quarterly	1	1	..	2	1
Monthly	9	5	..	14	7
"According to orders"	30	3	8	41	20
"Steady"	37	13	22	72	35
Total	115	37	52	204	100

[a] Of the 210 establishments investigated, 6 did not supply information.

[b] The period of greatest activity is generally before Christmas.

The binderies having "steady work" number 35 per cent of the total reporting, and employ 33 per cent of the total number of bindery women. Of the women employed in edition, pamphlet, and job binderies having a force of 50 or more women, 38 per cent work in establishments whose season is said to be steady, while of those who work in binderies having a force of less than 50, only 23 per cent are reported to be steadily employed. In some cases, however, this report of "steady employment" means that the busy season is not definitely marked. It does not mean always that the total force is employed on full time throughout the year. Winter is the busy season for 41 per cent of the women employed in small binderies, for 35 per cent of those employed in larger establishments, and for 47 per cent of the blankbook makers. "According to orders," manifestly an evidence of an uncertain season, is the report for 24 per cent of the women at work in small binderies. Of the whole group, winter is the busy season for 38 per cent of the bindery women; summer for 3 per cent; quarterly for 2 per cent; and monthly for 11 per cent. "According to orders" is the report for 20 per cent of the binderies, large and small, employing 13 per cent of the women workers. The proportion of workers laid off in dull season is shown in Table 16.

Of the maximum force of women employed in the busy season, 76 per cent, according to the statements of employers, are at work in the dull season.

In different groups of binderies this proportion varies. In blankbook making 90 per cent of the maximum force are at work in slack season, while in edition, pamphlet, and job binderies the minimum force is only 63 per cent of the maximum in those establishments employing less than 50 women, and 81 per cent in those employing 50 or more. Blankbook binderies appear to have the steadiest seasons. In edition, pamphlet, and job binderies, unemployment is most serious in the smaller establishments employing less than 50 women.

TABLE 16.—PROPORTION OF WOMEN EMPLOYED IN BOOKBINDING "LAID OFF" IN DULL SEASON IN ESTABLISHMENTS IN MANHATTAN[a]

Kind of Bindery	*Binderies for which Information was Secured*	Number of Women Employed		Women "Laid off" in Dull Season	
		Maximum	*Minimum*	*Number*	*Per Cent of Maximum*
Edition, pamphlet, and job binderies employing					
Less than 50 women	118	1,832	1,148	684	37
50 or more women	37	3,208	2,597	611	19
Blankbook binderies	53	860	773	87	10
Temporary bindery departments . .	15	40	..	40	100
Total	223	5,940	4,518	1,422	24

[a] Of the 280 binderies visited, 33 were only temporary departments, and 37 supplied in general inadequate information. Thus in the general discussion only 210 binderies have been included. In this consideration of seasons, however, it has been thought essential to include as far as possible all the binderies visited. Fifty-seven did not supply information on this point.

These figures indicate that the demand for workers so fluctuates that one of every four bindery women needed in the busy season is superfluous when the book market is dull. When orders grow brisk again employers rely largely on advertisements to increase their force. Thus the advertising columns of the newspaper considered in relation to other data on this point are a source of information regarding irregular employment. They indicate also the processes in which changes are most frequent.

TABLE 17.—PROCESSES MENTIONED IN ADVERTISEMENTS FOR BINDERY WOMEN IN *NEW YORK WORLD*, ON SUNDAYS AND WEDNESDAYS, FROM JULY 1, 1908, TO JUNE 30, 1909

Process of Work for Which Workers were Wanted	*Times each Process was Mentioned*
Hand folding	311
Wire-stitching	102
Machine folding (point folder, drop-roll, etc.) and knocking up	86
"General," "all round," "experienced," "generally useful," etc.	76
Numbering, perforating, paging, check-end printing	65
Hand gathering	58
Hand and bench sewing (full and half bound work)	47
Feeding ruling machine	46
Silk-stitching, looping, stringing cards	43
Inserting (hand)	37
Hand pasting	34
Tipping, covering, paper siding	32
Learners	31
Forewomen	26
Wrapping, examining, mailing, shipping	23
Machine sewing (including "cutting off")	20
Collating	14
Gold leaf laying	12
Head-trimming	1
Total	1,064

Box Girls
(Behind them is an automatic folding machine from which they lift the folded sheets)

Men Case-making and Girls Labeling

Hand folders, who more often than others are employed for temporary work, face frequent changes. They exceed any other group of workers in the number of times they are mentioned in advertisements. Wire-stitchers, often engaged for a small order of pamphlets, come second. Least frequently mentioned* are gold leaf layers, whose work requires care and skill in handling such precious material; collators, whose task is a responsible one; and workers experienced in machine sewing, which is considered the most highly skilled process in a bindery. It would appear that workers skilled in these processes are not easy to secure, and are therefore less liable to be discarded in dull season. The months of greatest demand and the branches of the trade which most frequently advertise in the newspapers are shown in Table 18.

A further tabulation of the total advertisements, daily and Sunday, which appeared in the last six months of the period covered in the preceding table, showed that they were inserted by 114 firms, including some who needed workers for temporary bindery departments in establishments engaged in allied work. One firm advertised 45 times, and one 37. Of the remainder, 37 inserted one to five advertisements; 41, five to 10; 20, 10 to 15; 8, 15 to 20; and 6, 20 to 30. Of the total the largest number appeared in March, probably due to the fact that general industrial conditions were better in the first six months of 1909 than in the latter part of 1908. Magazine and pamphlet binderies,

* Except head-trimming, a process in a job bindery.

TABLE 18.—ADVERTISEMENTS FOR BINDERY WOMEN IN THE *NEW YORK WORLD*, ON SUNDAYS AND WEDNESDAYS FROM JULY 1, 1908, TO JUNE 30, 1909, BY MONTH AND BRANCH OF TRADE

Month	Advertisements in Each Specified Branch of Trade						Total Number of Advertisements
	Edition Binding	*Magazine and Pamphlet Binding*	*Blank-book Making*	*Job and Art Binding*	*Calendar Work, Manifolding, Lithographing*	*Not Stated*	
July	5	11	5	..	..	2	23
August	26	11	13	..	1	2	53
September	10	17	10	1	..	4	42
October	7	23	5	1	1	1	38
November	11	25	13	4	4	..	57
December	13	29	11	8	4	..	65
January	7	36	13	8	1	8	73
February	8	35	12	..	4	6	65
March	28	37	14	10	5	8	102
April	10	46	10	2	..	6	74
May	16	23	16	1	2	8	66
June	17	51	14	3	1	4	90
Total	158	344	136	38	23	49	748

including bindery departments of printing establishments, were responsible for 344, or 46 per cent, of the advertisements.

Seasonal contraction of the force, however, is not the only cause of irregular employment in bookbinding. Girls may leave positions or be discharged when the largest number of orders are on hand, and thus irregular employment is greater than would appear from a study merely of the bindery season as it fluctuates with the changing demand for books, pamphlets, and magazines. Other factors contributing to unemployment and to frequent changes in jobs are shown in a tabulation of the reasons for leaving 353 of the positions recorded in the trade histories of the group of workers interviewed.

If we separate those reasons which obviously grow out of trade conditions, we find that they form a group of 73 per cent of the total. Illness may or may not be due to trade conditions. "Didn't like it," or "disagreement" indicates a minor form of maladjustment which might have been avoided. They are responsible for 9 per cent of the changes. "Worker unsatisfactory" is either a problem of education or an indication of the need of better methods of finding the right place for the right worker. The apparent unimportance of changes in machinery as a reason for loss of work is interesting in view of the many comments made on this subject by workers. It is probable that it was the indirect cause in more cases than appear in the

TABLE 19.—REASONS FOR LEAVING POSITIONS IN BINDERIES AS STATED BY WOMEN EMPLOYED IN BOOKBINDING

Reason for Leaving Position	Positions Left for each Specified Reason	
	Number	*Per Cent*
Slack season [a]	146	41.4
To advance,—higher wages or better work [a]	43	12.2
Firm failed, moved, etc. [a]	30	8.5
Dissatisfied with conditions of work [a] (night work, bad air, standing at work, carrying heavy weights, etc.)	23	6.5
"Didn't like it"	18	5.1
Illness	15	4.2
Disagreement	15	4.2
Strikes, rules of union, etc. [a]	11	3.1
To return to former position or occupation	9	2.6
Worker unsatisfactory	8	2.3
Changes in machinery [a]	3	.8
Other reasons (employer's violation of factory laws, or to marry, or other reason)	32	9.1
Total	353	100.0

[a] Reasons obviously due to trade conditions.

table. As already pointed out in Chapter III, the introduction of a new machine may result first of all in a general reorganization with a temporary transfer of workers to other processes. Often the workers find that their wages are less in these other lines of work and leave for that reason, or because the changed conditions result in a gradual reduction of the force. While the change in machinery is the real cause of this loss of position, it may not be the immediate reason appearing in the tabulation.

For all the reasons listed, jobs tend to be of short duration, and workers are likely to drift from bindery to bindery. To measure the length of employment in one position, a tabulation has been made of the duration of the last position preceding the date of the interview.

TABLE 20.—LENGTH OF TIME FOR WHICH WOMEN WERE EMPLOYED IN LATEST POSITION IN BOOKBINDING[a]

Time in Position	Number of Women Employed Specified Length of Time in	
	Last Position Left	*Present Position, if Worker is still in Her First Position in the Trade*
Less than 1 month . . .	29	1
1 month and less than 3 months	25	3
3 months and less than 6 months	17	1
6 months and less than 9 months	9	6
9 months and less than 12 months	7	2
Total less than 1 year . .	87	13
1 year and less than 2 years .	25	8
2 years and less than 3 years	12	5
3 years and less than 5 years	14	11
5 years and less than 10 years	10	5
10 years and less than 15 years	1	4
Total	149	46

[a] Of 201 women interviewed, 6 did not supply information.

Thus 87 of the 149 who are no longer in their first positions in bookbinding, held their last job less than one year. Yet, as already noted, the majority had been in the trade much longer than

one year. Only 17 per cent of those interviewed have had less than one year's experience in the trade, 29 per cent have worked in binderies one to three years, 18 per cent three to five years, 25 per cent five to ten years, and 11 per cent ten years or longer.* Obviously this experience in many cases has included more than one bindery, or more than one occupation. The number of positions (including those in other occupations as well as bookbinding) in which these girls have been employed in so short a time as twelve months preceding the interview, is shown in Table 21.

TABLE 21.—NUMBER OF POSITIONS[a] HELD IN PAST YEAR BY WOMEN EMPLOYED IN BOOKBINDING AT TIME OF INVESTIGATION[b]

Number of Positions Held	Number of Women Who Were in Specified Number of Positions in the Past Year	
	Number	*Per Cent*
1	83	51
2	35	22
3	26	16
4	13	8
5 or 6	4	2
7 and less than 11	2	1
Total	163	100

[a] In determining the number of positions, all occupations, whether in bookbinding or in some other trade, have been considered.

[b] Of 201 women interviewed, 29 had not been wage-earners during the entire past year and 9 did not supply information.

Of the 163 women included here, all of whom have been wage-earners a year or more, 80, or nearly

* See Table 13, p. 98.

half, have worked in two or more establishments in the past twelve months, and a few have changed from one employer to another four times or more. For the worker such frequent change, whether it be due to fluctuating seasons, uneven demand for labor, a casual attitude toward work, or any other cause, industrial or personal, means inevitably a loss of income. The first phase of the question to be considered is the loss of time between "jobs." This was determined for 176 positions.

TABLE 22.—PERIODS FOR WHICH WOMEN EMPLOYED IN BOOKBINDING WERE IDLE AFTER LEAVING POSITIONS

Time Idle	Positions After Leaving Which Women were Idle for Periods Specified	
	Number	*Per Cent*
"No time"	65	37
Less than 1 month . . .	50	28
1 month and less than 2 months	16	9
2 months and less than 3 months	12	7
3 months or more . . .	33	19
Total	176	100

The worker who finds another place within a week is likely to say that she has lost "no time." Although this was the statement made of more than a third of the positions, it is probable that in many of these cases a day, at least, was lost. In more than a third the loss was one month or more.

It is not only between positions that a worker loses time. She may be "laid off" for two or three weeks, or may work only part of the time without severing her connection with the establishment. The vital fact to determine in a study of irregular employment is the total loss of time and wages suffered by the worker through as long a period as her memory can be trusted. This is information which can be secured from no one except the worker. The payrolls in an establishment would give data only during her period of employment there, without showing whether she was employed elsewhere, or whether she was out of work the rest of the year. Yet, as already explained, to secure such facts accurately from the workers is exceedingly difficult, especially as the more irregular the employment the more strenuous is the task required of the memory. This difficulty is not peculiar to a study of women in the bookbinding industry. A search through literature on the subject reveals the lack of case histories of the workers which would show, as no other source of information can, the effect of irregularity on the worker's income. For this reason data about even a few cases will be of value.

Of the bindery girls interviewed 29 had not been wage-earners during the entire past year, and 52 could not state the length of unemployment accurately enough for tabulation. Table 23 contains the records of the remaining 120.

TABLE 23.—TIME LOST IN THE PAST[a] YEAR FROM ALL CAUSES BY WOMEN EMPLOYED IN BOOKBINDING[b]

Time Lost	*Women Who Lost the Time Specified*
"No time"	14
Less than 1 month	36
1 month and less than 3 months	36
3 months and less than 6 months	18
6 months or more	16
Total reporting	120

[a] Preceding date of interview.

[b] Of the 201 women interviewed, 29 had not been wage-earners during the past full year, and 52 did not supply information.

Less than one in eight reported no time lost for any cause, while three in 10 reported a loss of one to three months, and more than one in four lost three months or more. The causes of the lost time were about as varied as the reasons already cited for leaving positions. An estimate of lost time from slack season alone was secured from 148. This group in Table 24 is larger than that in the preceding table, because not all of these 148 could give an account of the time out of work for all other causes, but they did make convincing statements about the weeks when they were "laid off—slack," a phrase which has become very familiar to investigators.

Of the 148, who reported, a little more than a fourth had lost no time because of slack season. Twenty-five per cent could only say that they had suffered from this cause and could not

count up the days when they had worked part time, or when they had been out of work between jobs, or were laid off for temporary periods. The others made definite estimates of loss,—18 per cent less than one month, 15 per cent one to three months, 9 per cent three to six months, and 5 per cent six months or more. These were not uninterrupted periods. They were the sum of scattered days or weeks out of work through the year.

TABLE 24.—TIME LOST IN PAST[a] YEAR BECAUSE OF SLACK SEASON, BY WOMEN EMPLOYED IN BOOKBINDING[b]

Time Lost	*Women Who Lost the Time Specified*
"No time"	40
Less than 1 month	27
1 month and less than 3 months	22
3 months and less than 6 months	14
6 months or more	8
Some time lost, length could not be estimated (part time, etc.)	37
Total reporting	148

[a] Preceding date of interview.

[b] Of the 201 women interviewed, 29 had not been wage-earners during the past full year, and 24 did not supply information.

The periods of employment between these slack days were not in binderies only. Thus even these losses are less than they would have been had not many bindery girls found work in other occupations. Only 37 per cent of those interviewed had not worked in any trade except bookbinding, 28 per cent reported one other occupation, while 35 per

cent had been employed in two or more other industries in the course of their careers as wage-earners. Some of these had worked in as many as five or six other lines of employment. The list of other occupations is so varied that it reads like a page from the census. Bindery girls have been errand girls, cash girls, saleswomen, domestic servants, waitresses, nurses, clerical workers, telephone operators, laundry workers, dressmakers, milliners, straw sewers, and machine operators in other trades. Nor is this list complete. Their employment in processes of work more or less closely allied with bookbinding includes slip-sheeting in printing offices, folding patterns, sample mounting, stationery work, sorting and packing cards, and pasting calendars.

The statements of a few of the girls in the group whose records appear in these statistics may emphasize further the facts about irregular work. An inserter employed in a magazine bindery earned $12 one week, $12 the next, had no work and no pay the third, and earned between $8.00 and $9.00 the fourth. She said that this was the story of a typical month's work. Another, a learner, when asked to tell what her earnings had been in the past four weeks said, "a little over $4.00 the first week, a little more than $5.00 the second, $5.92 the third, and I got $4.65 this week. Sometimes I work two full weeks in the month but not often. We're not often laid off, but a week or two in the month we're on part time and go home

at 2 or 3 or 4 o'clock in the afternoon." Another's record reads, "Two weeks ago made $9.00, last week $1.50; had only two days' work. About two and a half full weeks of work in the month, not more."

"I earned $5.40 this week; last week I earned $9.00," said an expert feeder of the drop-roll folding machine in an edition and pamphlet bindery. She had been employed in the bookbinding trade six years. "Work is dull in the bindery now. There are signs up saying that we must not stop work until the whistle blows. They make strict rules like that because it's slack and they want an excuse to lay us off, but we're all behaving ourselves. My brother who works in the same place told me to go every day whether there was work or not, because otherwise I might lose my place. Last Saturday I knew I should not make a cent, but I went just the same and paid my carfare." She said that it was impossible to tell how much time she had lost. During two weeks in the month a magazine was being bound. At other times their work depended on whether a catalogue was being issued or a novel was ready for the binder. This girl complained of another cause of loss,—lack of promptness in repairing machines when they are out of order. If the operator is a piece worker, every hour of delay reduces her earnings. She has had this experience several times recently. When conditions were favorable and work plenty, her usual earnings were $9.00 in a week, but she could not

even estimate her yearly income, so much did it vary from year to year,—not because of variation in her personal efficiency but because of unforeseen changes in the condition of the book market, or in the prosperity of the firm employing her.

This girl was a skilled worker in the trade. For less expert bindery girls conditions are more serious. Since hand folding has become a casual task, necessary only for certain types of work for which machines are not adapted, the hand folders are drifters in the trade. One of them had been employed several years in binderies but had never learned to operate a machine. Hand folding had been her principal work. As a learner she had worked six months in an edition and pamphlet bindery, hand folding, straightening sheets, inserting, gathering, and mailing. Then she was "laid off—slack." Her subsequent trade history is made up of many brief jobs. She worked two or three months in an edition bindery, folding by hand, earning $7.00 a week; one month in a pamphlet bindery, $6.00 or $7.00; two months in a magazine bindery, $7.00; six months in a printing establishment, hand folding, inserting, gathering, with a piece-work wage varying from $7.00 to $9.00; three or four months binding pamphlets, $8.00 to $9.00; returned to the printing establishment twice in the year, once for two months, and once for eight months, earning $7.00 to $9.00; worked one year in another printer's bindery, earning $8.00 to $9.00 until the firm failed. After losing two to

three months of work, she got a job folding pamphlets by hand but stayed only one day, leaving because she was obliged to work on a raised platform less than six feet from the ceiling, and carry sheets from the bindery below it. In every other case, except when the firm failed, the reason for leaving was "work slack." "I would never advise a girl to go into bindery work," was her comment, already familiar to investigators by frequent repetition. "It's awfully unsteady, and anyway, there are too many in it already."

Another group of girls have not wandered from bindery to bindery in this way. One of these has been employed in the same bookbinding establishment eight years, and is now a collator there. With the exception of a candy factory where she stuffed dates one week just after leaving school, it was the only place where she had ever worked. Every summer while work was slack she has taken a vacation of two weeks, receiving no wages during that time. She says that in other binderies collators earn a dollar more a week than she is receiving. "But it's worth the extra dollar to me," she said, "not to be in a place where they rush you." Still, she is sorry that she has stayed so long. "They think more of you if you change more." During the preceding year she lost a great deal of time because of the widespread industrial depression. For several months there had been no work on Saturday morning, and the loss even of this half-day cost her nearly 70 cents

COLLATING

GATHERING MACHINE
(Man operating and women filling the boxes and taking out the gathered books)

of her week's pay and reduced her weekly earnings to about $7.30.

A girl sometimes prefers to accept a lower wage than is paid elsewhere, if she is reasonably sure of continued employment. One girl has been employed eleven years in the same bindery, "setting up" machines. She says that it is a machinist's work and that she could earn higher wages in another bindery, but she is afraid to leave lest another position might not be as steady. Legal holidays are the only time lost in the year. Another has been employed four years and has never lost a day except holidays. Even they have cost her a week's wages in a year. She is receiving only $7.00 a week for operating a wire-stitching machine, work for which a wage of $9.00 or $10 is paid in some binderies, but she prefers lower pay and steadier work.

The irregular employment of an expert folder who helps to bind a commercial register issued quarterly, is pictured in Chart IV. She worked in the bindery from February 1 to March 7, and was laid off through March to the middle of May; worked from the middle of May to July, laid off two weeks in July; worked from August 1 to Labor Day, laid off Labor Day to the middle of November; worked from the middle of November to January 15. "It would have been better," she said, "to have had $6.00 a week steadily instead of earning $8.00 so irregularly."

Loss of earnings is not the only result of irregu-

lar employment. The discouraging effect on the worker, the reckless spirit which is often produced by the uncertainty whether one's job will end to-day or last another month, the habit of drifting from one occupation to another,—these are wholly

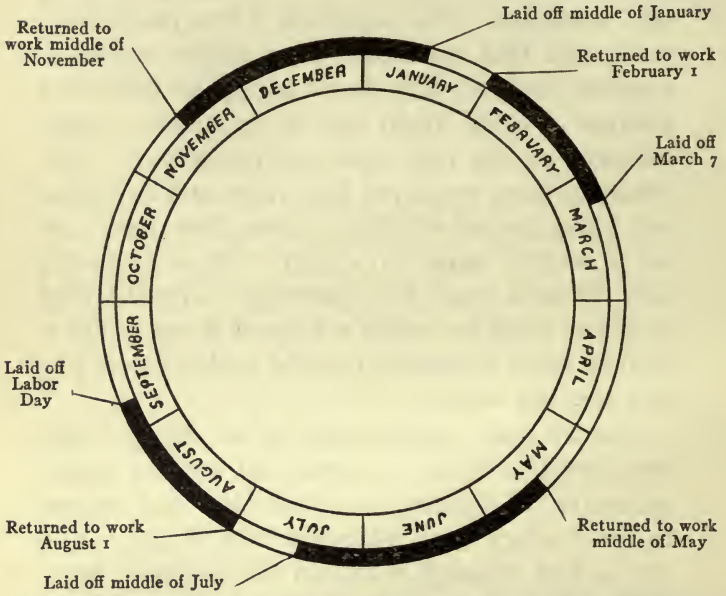


CHART IV.—PERIODS OF WORK AND IDLENESS, DURING ONE YEAR, OF A GIRL EMPLOYED IN BINDING A QUARTERLY PUBLICATION.

demoralizing influences, and they become more demoralizing rather than less so in proportion as the worker's wages are needed for the support of her family. Two important questions arise in a discussion of possible solutions. First, is there

any way of meeting the present seasonal condition, so that without loss of time or wages, the displaced workers may be transferred systematically from one bindery to another, or from one occupation to another? Second, and more fundamental, would it be possible to plan the work in such a way that the workers would suffer no loss of time and wages during the year?

At present the bindery girl must rely chiefly on her own efforts to solve the out-of-work problem. Her means of finding positions are shown in Table 25, which is based on a tabulation of how 439 jobs held by the group investigated were secured.

TABLE 25.—MEANS BY WHICH WOMEN FIND POSITIONS IN BOOKBINDING ESTABLISHMENTS

Means of Finding Positions	Positions Found by Each Specified Means	
	Number	*Per Cent*
Relatives	57	13
Friends	137	31
Applied, saw sign on door	75	17
Advertisements	90	21
Returned, sent for by former employer	32	7
Other means	48	11
Total	439	100

That more than a third found positions through applying at the bindery, seeing a "help wanted" sign on the door, or by answering advertisements, is significant of much wasted effort. Employers say that in certain seasons a hundred girls will answer an advertisement when two are needed.

"Applying" usually means walking the streets until a job is secured. To find a position with the help of a friend means often a haphazard choice, but it is the bindery girl's chief means of relief from unemployment. Because these methods depend more on chance than on forethought, and because the whole problem is so complex, many observers whose knowledge of labor conditions is most intimate are urging the establishment of employment bureaus to serve as clearing houses, enabling workers to get readily in touch with positions which would otherwise be unknown to them.

In a careful discussion of this subject, Dr. Edward T. Devine writes*: "The question which is pertinent and important is whether the unemployed are so (1) because they are unemployable, (2) because there is no work to be had, or (3) because of maladjustment." The third cause, he says, "an efficient employment bureau could at least to some extent overcome. It is obvious that if they are unemployed because they are unemployable, the employment bureau is no remedy. The only adequate remedy for a lack of efficiency would be education and training. If, again, they are unemployed because of a real and permanent surplus of supply over the demand for labor, it is plain that an employment bureau could not remedy the difficulty. . . In so far, however, as the lack of

* Report on the Desirability of Establishing an Employment Bureau in the City of New York, p. 5. Russell Sage Foundation Publication. New York, Charities Publication Committee, 1909.

employment is due to maladjustment, that is, to the inability of people who want work to get quickly into contact with opportunities which exist and to which there are no other equally appropriate means of access, the bureau will be justified."

It cannot be said that irregularity of employment in the bookbinding trade is due solely to this sort of maladjustment,—the inability of workers needing work to find openings where workers are needed. Some bindery girls are drifters, without the foothold which skill might give them in their occupation. Undoubtedly the industry itself is in part responsible for producing these drifters, but whatever the cause may be, an employment bureau could not directly apply a remedy. Furthermore, a large amount of unemployment in this trade is due to the unequal distribution of work throughout the weeks of the month, or the months of the year, which automatically results in a surplus of workers at certain seasons. An employment bureau could not at those times find openings where none exist. The workers' records show, however, that transfers from one establishment to another, from one branch of the trade to another, or even from bindery work to some other occupation, are entirely feasible. The difficulty is that because of the lack of any adequate clearing house for such transfers, time and effort are wasted in a blind search for jobs. This is where an employment bureau would find its opportunity, provided its equipment were adequate and its reach ex-

tensive in many different fields of employment throughout the city. Through continuous contact with market demands, and discriminating study of the fitness of applicants, unwise choice of positions and the loss of time involved in transferring workers from one establishment to another could be minimized, with distinct advantage both to workers and to employers. This same first-hand experience would enable an employment agent to read, in advance, the signs of a change in machinery or methods which so frequently displaces workers without sufficient warning. Furthermore, such a clearing house ought also to be a storehouse of information regarding the causes of irregular employment.

This transfer of workers from one position to another, without undue loss of time and earnings, is an immediate practical task, demanding a more effective system of guidance than newspaper advertisements can supply. More fundamental, however, is the possibility of preventing the necessity for such frequent transfers, by planning the work so that it may be evenly distributed throughout the year, thus avoiding dangerous over-fatigue at one period, and a total loss of income at another. Such a plan would involve no conflict of interest between capital and labor, since for both the steady use of the plant is of great advantage.

At present, however, little is being done in the bookbinding trade to bring about a more even

distribution of orders throughout the year. Some employers have attempted to keep the force together by various devices, such as dividing the work so that all would be on part time instead of a few on full time and the others out of work. In some binderies the girls are laid off in shifts two or three days at a time, instead of their being discharged for a continuous period. The binders who have attempted to remedy this irregularity by inducing publishers to place orders in dull season, even offering substantial reductions in price, say that their efforts have met with no encouraging response.

It is, in fact, a case of divided responsibility. Author, editor, publisher, printer, binder, critic, reader, all have a share, more or less remote, in creating the conditions which make the bindery girl's work irregular. If the author has been tardy in preparing the manuscript; if the editor has dallied over revision; if the publisher, with his eye on the critic and the reader, sends the book to the printer at the moment when all other publishers are sending their books and insists upon delivery at what he considers the psychological publication hour; if the printer has taken so many orders that he finishes this one several days late,—then all together will demand that the bookbinder make up for these delays by rushing through the binding in a day and a night. In the meantime the bookbinder, eager to have a hand in the issue of as many as possible of this sudden

harvest of volumes, has taken more contracts than he could possibly execute during the normal hours of work. At the last moment then, when the pressure is greatest, it is the bindery hands who must make up for the time lost all along the line. Following this rush period comes unemployment or part time. Thus the rush period deserves consideration as a point of attack in attempting to prevent the evil of slack season.

The necessity for such a stampede seems to be, after all, more or less a creation of the imagination of the makers and sellers of literature. Books are not perishable,—in the physical sense. They can be bound and stored until the time comes to flood the market with them. Furthermore, publishers are surely not powerless to create in the popular imagination the desire for continuous rather than for seasonal publication. If critics and advertisers can so manipulate the intelligence of readers as to sell one hundred thousand copies of a trashy novel, why can they not persuade the same readers to buy a book every month? Already magazine publishers have begun to realize that they need not all seek the same date of publication.

Unfortunately, however, a stronger motive for change is needed by the men and women who are managing the book market than the desire to give steady work to an unknown bindery hand. Uniform pressure is necessary to restrain the least humane of employers from under-bidding his competitors by overworking his employes. Such

pressure may be provided by factory legislation. Interesting testimony on this point was brought together in a report of commissioners appointed to inquire into the working of the Factory and Workshops Act in England in 1876. Members of women's trade unions were called to testify.

Bookbinders, questioned about the relation of legislation to their occupation, complained that the trade was most unnecessarily considered by the law a season trade. Moreover, they thought that the existence of the modification (permitting an extension of hours to fourteen per day, during certain periods of the year) made employers careless of due economy in time. They declared that "there is a great deal of work done during those months which might as well be done during the slack season, such as school books or anything of that kind that are always required, but they are generally kept back until the beginning of the winter season comes on." One witness was asked whether it would be possible to bind magazines without working overtime. The reply was, "Not at present, but I think it is a thing which could be managed in time, because I think the publishers, when they know they can get them done by a certain day, very often keep them back when they might be pushed forward; because in such an emergency as that there is no respect to the Act, they keep them back until the last moment."*

* Report of the Commissioners appointed to inquire into the working of the Factory and Workshops Acts, Minutes of Evidence, p. 135. London, Eyre and Spottiswoode, 1876.

This testimony, corroborated by statements made by New York bookbinders, suggests that restrictions on overtime in busy season would be a powerful means of compelling a more even distribution of orders. The bookbinder who was sure that he and all his competitors must obey a state law limiting the hours of women's work would refuse orders which he could not execute in a normal working day. Publishers and all others concerned in the issue of a book would then be forced to adjust their plans to the new condition, by allowing more time for the binding. The difficulty of getting work done in busy season would also make them more responsive to the binders' overtures for dull-season orders. It is evident, therefore, that in legislation limiting the hours of work the state has one means of meeting its responsibility for the problem of steadying the seasons.

CHAPTER VI

OVERTIME AND THE FACTORY LAWS

BOOKBINDERIES are factories in the legal meaning of the term. According to the New York law no child under fourteen years of age may be employed in a bindery. None between the ages of fourteen and sixteen may work unless provided with an employment certificate, nor may a child between these ages work longer than eight hours in a day, or at any time, except between the hours of 8 a. m. and 5 p. m. At the time of this investigation, no woman of sixteen years or older might be employed more than sixty hours weekly, more than six days in a week, or more than ten hours in a day except under certain conditions.* She might work overtime, however, regularly on five days in the week in order to make the sixth day shorter. Or she might work overtime irregularly on three days in the week, provided that the working day never

* By an amendment enacted by the 1912 legislature, which took effect October 1st, 1912, the working week for women was reduced from sixty to fifty-four hours, and the working day to nine hours, while certain exception clauses permitted ten hours under certain conditions, but never twelve hours as was possible under the former law. As this investigation was made before the enactment of the fifty-four hour law, the discussion in this chapter relates to a working week of sixty hours. The underlying principles of enforcement, however, and the need for public support of such legislation, as it is illustrated in the bookbinding trade, are unchanged by the differences in the law.

exceeded twelve hours. Practically then, the New York law permitted a twelve-hour day. Under no conditions might the weekly hours exceed sixty. No woman under twenty-one years of age might work between the hours of 9 p. m. and 6 a. m. Women over twenty-one might work by night or by day, provided the working week did not exceed sixty hours and that the working day was not more than ten hours, except under the conditions already described, when a twelve-hour day was permissible. The law which became operative in October, 1912, reduced the sixty-hour weekly limit to fifty-four, and the daily hours to nine, with permission to work ten hours on the same terms which formerly made twelve hours possible. For children under sixteen then, the statute is plain,—no work before 8 a. m., or after 5 p. m. or longer than eight hours in any one day, but as soon as the sixteenth birthday is passed the legal day is lengthened and confusing exceptions are introduced into the law. Their application to the bindery industry can be made clearer by showing the actual hours of work of a few women in the trade.

A girl of sixteen worked in a large bindery where books, department store catalogues, and a monthly magazine were bound. Her regular hours were eight in a day, from 8 a. m. to 5 p. m.; forty-eight in a week. Each month from the 16th to the 25th, when the magazine was bound, she worked until 9 p. m. sometimes twice and sometimes three times a week. Her day then was from 8 a. m. until

9 p. m. with an hour for lunch and a half-hour for supper, or a total of eleven and one-half working hours, excluding meal time. The total weekly hours of labor were fifty-five when she worked overtime twice, and fifty-eight and a half when she stayed three evenings. This schedule of hours did not violate the law in any particular. The girl was sixteen years old and hence was not protected by the eight-hour law for children of fourteen and fifteen. She did not begin work before 6 a. m. nor work later than 9 p. m. She had thirty minutes for supper; the law requires only twenty minutes' recess when working later than 7 p. m. The total daily hours of actual labor when working overtime did not exceed eleven and one-half, and never occurred more than three times in a six-day working week; the law permitted twelve hours three days in the week. The total working week did not exceed fifty-eight and a half hours; the law permitted sixty hours. Thus it was possible to work overtime without violating the law.

In September and in February, however, this bindery no longer kept within the law. At those seasons the fall and spring catalogues of department stores were bound. Instead of working three nights, employes stayed until 9 p. m. on five nights a week and sometimes added three hours on Saturday, so that the working week was sixty-five and a half hours long with five days of overtime, or sixty-eight and a half when the Saturday's overtime work was added.

The differences between this schedule and the preceding one are the length of the working week, and the five or six days of overtime, instead of two or three, above ten hours. These differences constituted violations of the law. Sixty-eight and a half hours exceeded the legal sixty, and a day of longer than ten hours was permissible only when it occurred (a) regularly on five days or less, as a means of shortening the sixth day while completing a full week of sixty hours or less, or (b) irregularly on three days or less. This bindery could legally have lengthened its daily eight hours regularly to eleven from Monday to Friday and then worked five hours on Saturday. When the overtime above ten hours occurred "irregularly" at rush seasons, it must be limited to three days in a week.

This illustration suffices to show the difficulty of enforcing either the sixty-hour law or the new fifty-four hour provision. Two or three nights of overtime does not constitute a violation. Proof cannot be complete without data showing the hours of actual work, exclusive of meal time, each day, and their combined total. A single inspection would be sufficient to give basis for prosecution if a girl under twenty-one were found working after 9 p. m. In that case, the inspector would be obliged to prove the age as well as the time at which the girl was found at work.

This proof of age is necessary because, as soon as a woman passes her twenty-first birthday, the provision of law prohibiting the work of younger

women after 9 p. m. or before 6 a. m. no longer applies to her. A girl twenty-three years old was employed to fill the boxes of a gathering machine in a magazine bindery. She worked from 8:30 a. m. to 5:30 p. m. with a half hour at noon. She began again at 6:30 p. m. and worked until midnight. After a recess of thirty minutes she continued her day's task until 5:30 a. m. This was a total working period of nineteen hours. Since the law permitted a twelve-hour day, and did not prohibit employment of adult women during the night, a working day of twenty-four hours was legal for them. With the stroke of the clock at midnight, a twelve-hour day ended and another twelve-hour day might begin. In the case of this girl, not the long stretch of work, but the fact that fourteen hours instead of twelve preceded midnight, was a violation of the law. The legal provisions would have been fulfilled had she begun work two hours later and stayed in the bindery until noon the next day.

These illustrations reveal the inadequacy of the law, its confusing exceptions and its failure to prohibit night work. Exact evidence as to its enforcement in any one trade is difficult to secure. Employers are not likely to give full information about their own offenses against it. Workers are often afraid to give exact facts damaging to their employers, lest to do so should result in loss of their jobs. In the bookbinding trade in particular, investigators encounter the further difficulty that overtime is so customary

that it does not occur to the workers to speak of it. They are surprised at the question, Have you ever worked overtime? "If you're in bindery work, you have to," they reply. Nevertheless, a statistical measure of the extent of overtime work has been secured by tabulating the girls' statements about their most recent positions. Their testimony about the physical effects of the work will show the need for a stronger law and better enforcement. First, however, it is important to know the length of the normal working day and week without overtime, as it appears on the records

TABLE 26.—DAILY HOURS OF WORK OF WOMEN EMPLOYED IN BOOKBINDING[a]

Daily Hours of Work	Women Working Specified Hours in					
	Edition and Pamphlet Binderies Employing 50 or more Women		*All Other Binderies*		*All Binderies*	
	Number	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
Less than 8 hours	..	..	58	2	58	1
8 hours . . .	1,013	31	420	17	1,433	25
More than 8, less than 8½ . .	..	..	21	1	21	[b]
8½ and less than 9	1,440	45	582	24	2,022	36
9 and less than 9½	790	24	1,214	49	2,004	35
9½ and less than 10	..	..	135	6	135	2
10 or more . .	..	..	16	1	16	[b]
Total . .	3,243	100	2,446	100	5,689	100

[a] Information was secured from 208 binderies, employing a normal force of 5,689 women. This table shows hours on first five days of the week, but not on Saturdays. [b] Less than 0.5 per cent.

of binderies, supplemented by workers' reports and by figures given by the New York State Department of Labor.

Nearly three-fourths work between eight and a half and nine and a half hours a day, while 25 per cent have an even eight-hour day. This statement applies to the hours of labor on the first five days in the week. In many cases the excess over eight hours on these days is due to a schedule by which the working period on Saturday is shortened, while the length of the week is forty-eight hours.*

TABLE 27.—WEEKLY HOURS OF WORK OF WOMEN EMPLOYED IN BOOKBINDING[a]

Weekly Hours of Work	Women Working Specified Hours in					
	Edition and Pamphlet Binderies Employing 50 or more Women		*All Other Binderies*		*All Binderies*	
	Number	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
48 hours or less	2,278	71	818	35	3,096	56
Over 48 and less than 50	125	4	178	8	303	6
50 and less than 52	135	4	332	14	467	9
52 and less than 54	380	12	287	12	667	12
54 and less than 56	275	9	617	27	892	16
56 and less than 58	..	..	60	3	60	1
58 and less than 60	..	..	16	1	16	b
Total	3,193	100	2,308	100	5,501	100

[a] Of the 5,689 women employed in binderies supplying any information regarding hours, 188 were in establishments which did not give complete data on weekly hours of labor. [b] Less than 0.5 per cent.

* The time of beginning and ending work, and length of noon recess are shown in Appendix B, Tables I, J, and K, pp. 254–255.

Thus when not working overtime 56 per cent of the bindery women in these establishments have a normal working week of forty-eight hours, or, in a very few cases, less, and less than 2 per cent work fifty-six hours or more a week. In the busy season, however, these hours are frequently prolonged, and this lengthening of the normal day or week is always called "overtime," although it may not exceed or even equal the limit allowed by the law. Thus, a distinction must be kept in mind between overtime which is illegal because it exceeds the limits set by law, and overtime which is merely an excess above the usual schedule of hours prevailing in an establishment, without violating the state labor law designed to prevent excessive overtime. Of the 36 large edition and pamphlet binderies from which information about overtime was secured, 31 reported that they lengthened the hours of work at some season of the year. Of 88 smaller establishments giving this information, 63 had overtime, and of 31 blankbook makers, 22. These figures are based on the employers' statements.

Although these establishments may not all exceed the limit of the law, the girls' statements regarding 227 positions which they have held very recently indicate that many do. Usually one girl's experience represented that of a number of her fellow-workers. Nine per cent of the reports of overtime were from girls under sixteen, 22 per cent from those sixteen to eighteen, 40 per cent

Wire-stitchers. Artificial Light all Day

One End of a Crowded Bindery

from workers between eighteen and twenty-one, and 29 per cent from those twenty-one and over. This indicates how large is the proportion of young girls among the workers whose hours are prolonged in busy season. The girls' reports covered 88 different binderies of which 36 were edition and pamphlet binderies employing 50 or more women. Seventy per cent, 159, of the reports showed overtime, including legal and illegal, while more than half of these instances of overtime were violations of the law. Workers reported 152 distinct violations in 42 different establishments. Table 28 classifies these violations according to the section of the law to which they relate.

TABLE 28.—VIOLATIONS IN BOOKBINDING ESTABLISHMENTS OF LAW RESTRICTING HOURS OF WORK FOR WOMEN AND GIRLS

Nature of Violation	*Number of Violations of each Specified Nature*
Employment for more than 60 hours weekly	51
Employment for more than 12 hours daily	35
Employment for more than 10 hours daily, irregularly more than 3 times a week	25
Less than 20 minutes allowed for supper to women working overtime more than 1 hour after 6 p. m.	15
Employment for 7 days a week	8
Employment of women under 21 years of age after 9 p. m.	17
Employment of women 21 years and over after 9 p. m. (before law was declared unconstitutional)	1
Total	152

These statistics are in no sense a measure of conditions in the trade. They are merely illustrations of too prevalent a practice of lengthening the hours of work in binderies. A fuller discussion of the girls' reports of overtime, both legal and illegal, will make the situation clearer.

Some of their 159 reports of overtime showed comparatively early closing hours, which were not violations of law (and did not appear in Table 28). In 21 per cent of the 159 cases the girls were not kept later than 7 o'clock, and in 16 per cent they left the bindery between 8 and 9. In 44 per cent they stayed until 9 and in 19 per cent, almost one in every five, they worked until later at night. Several flagrant cases were included in this last group; one reported work until 12:30 a. m., three until 1 in the morning, two until 3 o'clock, one until 5:30, one until 8 and one until 9 the next morning. In every one of these cases the girl had gone to work in the morning and worked throughout the day and evening until after midnight.

For a girl to leave a bindery at such late hours as are here indicated, and go home alone through the streets, is obviously dangerous. The fact that the law permits women of twenty-one or over to work after 9 p. m. also makes a loop-hole for employing younger girls until late at night. One of the girls whose record appears in these statements was employed at the age of seventeen to stitch programs for opera houses and theaters.

During the theater season she worked overtime until 11 or 12 o'clock at night, a day of fourteen and a half hours. She walked home alone, past the closed business houses downtown. "Only bums are down there at that hour of the night," she said.

Another girl of the same age was employed a year and a half in a pamphlet and magazine bindery "knocking up." She frequently worked overtime Saturday night, sometimes staying until 2, 3, or 4 o'clock Sunday morning. Her home was in one of the worst sections of Fourteenth Street. She was laid off in March and had great difficulty in securing any other position. A few weeks later she disappeared and no one in her family knew where she had gone. Whether her employment at night and her walks along Fourteenth Street at 2 or 3 a. m. were the direct cause of her disappearance cannot be proved. But the danger of adding such influences to those which already surround young girls in a city like New York needs no proof.

The total hours daily in all reports of overtime showed as wide a range as did the statements about closing hours. In 9 per cent of 139 cases in which the daily working hours were fully reported, the maximum day when working overtime did not exceed ten hours, in 14 per cent it was between ten and eleven hours, and in 29 per cent it was between eleven and twelve hours in length,

exclusive of meal time. Twelve-hour days appeared in 23 per cent of the reports, while in 25 per cent the overtime day was longer than twelve hours.

The detailed reports of working days longer than twelve hours show appalling conditions. These hours represent actual working time, after deducting the length of noon recess and the time allowed for supper. In four positions the day was 12¼ hours long; in seven, 12½ hours; in three, 12¾; in nine, 13; in one, 13½; in two, 14; in two, 15½; in two, 16; in two, 18; in one, 19½; in one, 21½; and in one, 22 hours. The United States government investigators, whose report has been quoted,* found an even more alarming example of overwork of a girl in a bindery,—a working "day" of 24¼ hours.

The occurrence of these long days is, of course, not consecutive or continuous. That would be unendurable. For example, magazine binderies are notorious for the great irregularity in the length of successive days. The working week of a girl employed in one of them is shown in Chart V. The normal day is nine hours, but only one in this week was of that length. The other days varied from four to fifteen working hours. After fifteen hours of work on Thursday and fourteen on Friday, it requires no argument to prove that a short day of four hours on Saturday

*See page 2.

even followed by rest on Sunday does not compensate for the intense physical strain endured on those two days. Thus, even though the working week was only two and a half hours longer than the law allows, within that time an exhausting period of labor was possible. A tabulation of the weekly hours, however, indicated also excessive overwork in many positions. Not all the reports of overtime gave all the information necessary for determining the length of the working week.

The weekly hours were within the legal limit, sixty hours or less, in 46 cases, and exceeded it in

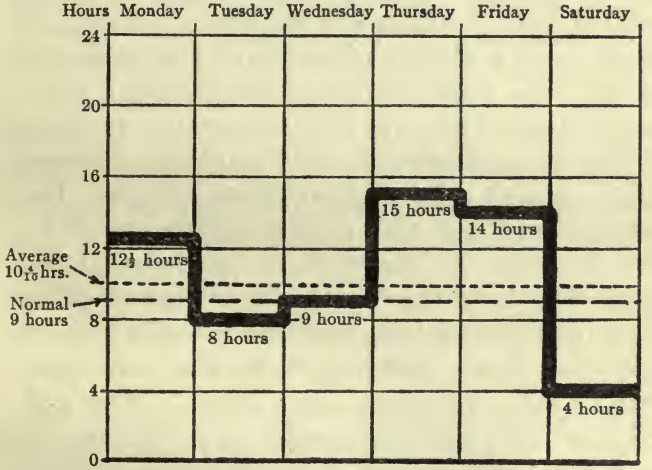


CHART V.—DAILY HOURS OF LABOR IN A ONE WEEK PERIOD, IN A PAMPHLET BINDERY

51. The details of the group working 70 to 80 hours showed 70 hours in three cases, 71 in two,

72 in one, 72½ in one, 75½ in one, 78 in two, and 80 in one. To realize fully how great a menace such overwork is to the health of bindery girls, it is necessary to emphasize the nature of their tasks, the conditions under which they work, the possible danger of accidents, and the more common danger of fatigue to which many of the workers bore witness.

Liability to accidents increases with overwork, and must be considered in relation to the legal regulation of the working day. Injuries to the hands or fingers seem to be more frequent than fatal accidents among bindery women. The worker usually suffers loss of time as a result; in some cases a change of occupation is necessary. A girl who worked in the trade fourteen years, said that she had never tried to operate a machine. "They're too dangerous, and if you lose your finger the boss ain't goin' to do anything for you. I've seen girls get the ends of their fingers cut off by the machine." "We work on machines at our own risk," said the feeder of a folding machine. "On the point folding machine the girls have to put their hands under the knife and draw them back before the knife comes down." One girl, sixteen years old, was employed to operate the wire-stitching machine in a magazine bindery. She wire-stitched her finger one Sunday morning early when she had been working steadily since Saturday at 8:30 a. m. One girl had her finger caught by the descending knife of a cutting ma-

chine from which she was taking the magazines. She fainted and was taken to a hospital. She reported every day at the bindery for three weeks and was paid full wages ($7.00 a week) but did very little work except running errands. After three weeks, the finger was better, but she was so unnerved that she could not work near the machines. She folded sheets by hand, but her injury hindered her in the work, and prevented her earning more than $4.00 a week. Another girl lost the forefinger of her right hand while operating an indexing machine in a blankbook bindery. At that time she was earning $5.00 a week. The company did not reimburse her loss, although she had to begin again as a learner and practice other processes in which the loss of the finger would not be a hindrance. "Any machine is dangerous if you don't watch it carefully," said another girl. Over the entrance to the workroom of a magazine bindery is a sign which reads:

"DANGER. All persons are warned to use care when around machines and promptly to report any defects."

The fatigue caused by prolonged periods of work is greatly increased when the workroom is dark, dusty, or badly ventilated. Great variety characterizes conditions in the workrooms of New York binderies. Girls have been found stitching a magazine "devoted to the interests of health," in a cellar workroom entirely below street level,

lighted by gas. Others have been found at work in large lofts of high buildings, where ventilation and light were excellent. In some binderies a modern passenger elevator carries one to the workroom; in others one must choose between long flights of dark and dusty wooden stairs and the slow freight "hoist" with its sign, "All persons riding in this elevator do so at their own risk." Overcrowding, insufficient lighting, and lack of proper ventilation endanger the workers' health in too many binderies. Books piled high cut off light and air. The seats provided often lack backs or foot-rests, and in many processes constant standing is the custom.

The story of a bookbinder who is now too ill to work will illustrate the danger to which many of her fellow-workers are exposed, through bad workroom conditions, combined with the breaking down of physical resistance by heavy tasks and long hours. A board of health physician found this girl tubercular, and through the activity of a relief society she was sent to a sanatorium. The girl's home and the place where she had been employed were visited. She had worked five years in the same workroom. Before that, illness had forced her to leave her previous position, which she had held also for five years. In this first position, she had frequently worked overtime in winter three nights a week until 9 p. m., a day of twelve and a half hours. To save carfare she had walked to and from the bindery. "I'd walk

home," she said, "and mamma'd be out nursing and I'd be too tired to get any supper; that's how I got run down." She was ill three months. A physician then said that her lungs were sound, but that care would be necessary to keep them so.

In the bindery where she was at work when she became ill with tuberculosis she had stood all day during the first year, examining and wrapping heavy bound volumes for a wage of $4.00 to $5.00 a week. After that she learned to collate the sheets of the books, and sat at work. The paper was heavy. It "tired" her chest and back to hold the sheets while collating. Although she was a week worker "it was necessary to rush because I had to keep the sewer, who was on piece work, supplied. If I didn't collate fast enough she'd complain to the forewoman that she couldn't make out."

To conditions in this workroom she attributed her illness from tuberculosis. Other cases had developed in the same bindery. The books were not always bound immediately. After they had been gathered they were sometimes stacked for months, and the collators were the first ones to handle them while they were covered with accumulated dust. The workroom was not kept clean, and the floor was swept while the girls were at work. In response to a complaint the Labor Department sent a ventilation expert to investigate the bindery, and the results of the inspection were reported in these words:

"He found the air openings in the windows too small for proper ventilation and ordered them to be enlarged. The air test showed 12 to 14 parts carbonic anhydride in 10,000 volumes, which is above the legal limit. The water closets were found clean. The fourth floor workroom (women's department) was found blocked with accumulated stock which was covered with dust. Orders were given to cover the stock and wet-cleanse the floor every day."

This girl's home was immaculately clean, and her mother a careful housekeeper. But good care at home could not prevent the undermining of health in ten years of bindery work beginning with long daily hours, a walk home late on cold winter nights, a deferred supper or none at all because she was "too tired to eat," a heavy cold, and then five years of exhausting work in a bindery where the dust was allowed to accumulate and was then stirred up by handling sheets of paper or sweeping while the workers were in the bindery. Yet no factor in this bindery girl's history is unique, except her unusually comfortable home.

A witness of the processes of work in bookbinderies would require no medical proof of two chief dangers to which bindery women are exposed, the danger from the accumulation of dust on paper, and the danger of fatigue. The workers' own statements are important as testimony on these points.

"She was all worn out and she got so thin there

A Crowded Workroom

Accumulated Stock Gathering Dust

wasn't anything to her," said the mother of a girl who for three years had worked all night two or three times a week in the winter months. She began in the morning and worked until 5:30 a. m. the following day. "Then she was supposed to rest all day and until the next morning at 8 when she went to work again," said her mother. "But she got so tired she would cry all morning when she came home and she couldn't sleep well. The doctor told her she'd have to stop night work."

In a certain bindery in New York a grocers' catalogue is bound every Wednesday evening. In order not to miss tardy advertisements it is not brought to the bindery until 7 p. m. Two women work until 10 or 11 p. m. to prepare it for the mail Thursday morning. After that hour, one of them, twenty-three years old, must journey an hour from Brooklyn Bridge before reaching home uptown in Manhattan. Just before the Fourth of July, 1911, in a record-breaking hot spell this girl was overcome by the heat at night in the bindery. She was dizzy and nauseated, and "could hardly hold her head up," but the grocers' catalogue must be wire-stitched and she could not stop work until the order was finished. She was ill for two weeks afterwards, receiving no wages for the time lost, but the catalogue was mailed in time, and thus the firm did not lose the contract for binding it.

But aside from the fatigue caused by working such long hours, the processes in themselves are hard, even under the best conditions. "Gather-

ing is very heavy," said a bindery girl in New York City. "I'm always thin. I never can pick up." One girl wears gloves while inserting the large sheets of a magazine one within another, to prevent the swelling of her hands and wrists. Another bandages her wrists. "The work wears you out after awhile," she said. Both these girls stand at work all day. "Bindery work is very hard work," said another. "When you get your wages, you've earned every cent. When the girls get home they're too tired to do anything." "I don't like bookbinding," said a learner who had been employed a year in the trade. "They're getting machines for everything. I was on a machine, gathering, and every once in a while I'd be so tired I'd have to stay home a day. Knocking up is tiresome too." A girl seventeen years old who had charge of four folding machines said that tending them made her so nervous that she frequently cried from fatigue when she reached home at night. "No girl should go into bookbinding unless she is very strong," said another. A young learner emptied the boxes into which the large folding machine delivers the folded sheets. The work was so heavy that she broke down and was idle three months. "They ought to have boys to do that work," she said.

An examiner and wrapper who handled the completed volumes, often heavy, asserted that the rapid turning of the pages of the books tired her eyes very quickly. "At first," she said, "I used

to see the pages moving in my sleep." She stood at work and seldom had a chance to sit down. "We fairly had to swipe our chairs. If we sat down long they'd give us a look, as much as to say, 'It's time you stood up.'" Another girl, who stood always while doing this work, left because of illness; she said that it was due to standing and to holding the heavy volumes. Her two sisters had been bindery girls. Their father objected to their working in this trade. "He can't be havin' us work in binderies, and then be havin' to pay doctor's bills."

A girl who was employed more than four years in the gold laying department of an edition bindery was obliged to leave the trade because of illness. Air, circulating freely, might blow the gold leaf. Lack of ventilation caused her to faint and have nausea. Another gold layer said that it was impossible to ventilate the room, and that in summer it was almost unendurable. Others complained, also, of eye-strain. "The gold has a glare," said one of them.

"I would never advise a girl to take up numbering," said an operator of a numbering machine, which is run by a foot-pedal, pressed eight or ten thousand times a day. "I know a lot of girls that have had to have operations because of it." In a blankbook bindery, a girl who does general work complains of severe pains in her side, due to the constant pressure of the foot on the pedal of a perforating machine. Usually she does a few

hours' work a day on this machine, and then turns to other work, but recently the firm had a large order which lasted nearly four weeks, and the machine was running constantly, one girl taking it the moment another stopped operating it. The bulk of this work falls to her share because she operates the machine more carefully than the others. The visitor's report of her interview reads: "Katie looks worn out and is discouraged because she doesn't get more than $7.00 for the hard work she is doing. She was busy washing the supper dishes (8:20 p. m.). Her younger sister was dressing to go to a wedding. Katie said that she used to go to dances and weddings when she was young but she is too tired to go now. She is twenty-two years old."

It is obvious that even the unskilled work of lifting sheets from the boxes of machines or carrying books from one part of the workroom to another is exhausting, especially if the working hours be long. Doubtless it was dislike of this heavy work which led the London Societies of Journeymen Bookbinders, in an agreement in which the women workers were not represented or consulted, to declare that "they will not make it a grievance if," in addition to a few other processes, "female or unskilled labour is placed upon the carrying of loads of work about the work shop."*

* MacDonald, J. Ramsay: Women in the Printing Trades, p. 8. London, King, 1904.

"Physical effort," writes Dr. Oliver,* "and the lifting and carrying of heavy weights not only impress themselves upon the muscles and nervous system, but upon all parts of the body, particularly the bones in early adolescence and the period of growth. . . . If standing all day when at work in an overheated factory causes tiredness of the muscles and also varicose veins, prolonged sitting may be just as harmful, for the lumbar region of the spinal column becomes bent, the movements of the abdominal viscera are interfered with, the lower ribs are compressed, and since deep inspiration is hardly possible the lungs are badly ventilated and the aeration of the blood is imperfect." It follows that specialization in processes, which compels a worker to maintain one position throughout the working day, should be listed among the occupational dangers. This danger exists in binderies, and is multiplied as the hours of labor are prolonged.

An increasing number of experiments to determine the nature of fatigue are supplying scientific proof of the need for labor legislation.† "Fatigue or tiredness," writes Dr. Oliver,‡ "is a sensation, the outcome of a particular state of the nervous system, the result of work carried beyond the capabilities of the organism. In ordinary physio-

*Oliver, Thomas, M.D.: Diseases of Occupation, p. 11. New York, Dutton, 1908.

†Goldmark, Josephine: Fatigue and Efficiency. Russell Sage Foundation Publication. New York, Charities Publication Committee, 1912.

‡ Oliver, op. cit., pp. 6, 9.

logical activity exhaustion is never attained, for fatigue is the warning signal. . . . The waste products added to the blood act upon the nerve endings in muscle and upon the grey matter of the brain, and create a sense of fatigue. . . and on the other hand they poison the large nerve cells in the grey matter of the brain, render them less receptive of sensory stimuli, and in this way reduce their power of emitting volitional impulses. There is, therefore, in fatigue an element that is mental as well as physical. After rest and sleep the sensation of fatigue wears off, and we rise invigorated and strengthened for work. During repose, structure is being rebuilt and waste products are eliminated. . . . One of the important features of overwork, calling for notice, is the manner in which fatigue is repaired. It is a question of length of time."

It is evident that fatigue is not the result of a particular process of work, but a sign of overwork in any occupation. The time element is the decisive factor in its cause; it is also the decisive factor in recovery. Of course, the length of time necessary to induce fatigue varies with the nature of the work, and the individual power of endurance. But that time alone can cure fatigue, and that exhaustion may be the result of ignoring it are facts which the scientists have proved applicable to every worker in every occupation. It is the purpose of labor laws to protect the health of workers against the poisonous effects of fatigue. How in-

adequate is the protection extended to bindery women in New York is clear, and suggests a discussion of the law.

In 1886, the legislature of New York state passed its first factory law, entitled "An act to regulate the employment of women and children in manufacturing establishments, and to provide for the appointment of inspectors to enforce the same." According to this law no woman under twenty-one might be employed more than sixty hours in any one week, "unless for the purpose of making necessary repairs." It prohibited the employment of any child under the age of thirteen years. Only one inspector and one assistant were appointed to enforce it. In 1889, the daily working hours of women under twenty-one years were limited to ten, but an "exception" clause permitted longer days for the purpose of shortening the hours of work on Saturday. In the same year night work of women under twenty-one years was prohibited between the hours of 9 p. m. and 6 a. m. In 1899, by a single act, the provisions of the law were extended to all women irrespective of age.

Judging by the number of prosecutions, lax enforcement has characterized the history of the law. In the six years preceding 1906, there were only four prosecutions in New York state either for employing women more than sixty hours in a week or for employing them after 9 p. m. in any factory. Only one employer was convicted and fined in that period. One was acquitted. Two were con-

victed and sentence suspended. Yet violations were known to the commissioner of labor, for he wrote in his report of 1902,*

"Reference to the tables of orders, complaints, and prosecutions will show that the principal source of trouble is the tendency on the part of factory managers to exact longer hours than the legal maximum for women and minors, and to employ children without filing the required certificate of age, school attendance and physical fitness."

The year 1906 was characterized by a sudden burst of activity with more than three times as many prosecutions begun as in the preceding five years. Six employers in the bookbinding trade were arrested for employing women after 9 p. m. Seven other prosecutions were begun for employing women more than sixty hours in a week.† This activity resulted in court decisions in two cases in the same year, in one of which the prohibition of night work was declared unconstitutional, while in the other the sixty-hour law was held to be a legitimate exercise of the police power of the state.‡

* Second Annual Report of the Department of Labor of the State of New York, 1902. Vol. I. Pt. III. Report of the Bureau of Factory Inspection, p. 24.

† New York State Department of Labor, Factory Inspection, 1906. Part II, p. 210.

‡ The case of one Mary Seeback's employment in a laundry more than sixty hours in a week never passed beyond the court of special sessions, which declared that "a law which attempts to limit the number of hours of labor of a woman employed in a factory, may well be a health regulation and a proper legislative exercise of the state's police power." New York State Department of Labor, Bulletin No. 31, December, 1906, p. 484. For court decision, People v. Howe, Court of Special Sessions, see Appendix C, pp. 256–258.

The case regarding the prohibition of night work, now wellknown as the People v. Williams, is of direct interest in a study of the bookbinding trade. The opening paragraphs of the judges' decision give the setting.

"At twenty minutes after ten o'clock on the night of January 31, 1906, a deputy factory inspector visited the bookbinding establishment of the defendant, No. 437 Eleventh Avenue, in the County of New York, and there found one Katie Mead, a female more than twenty-one years of age, and a citizen, employed in 'gathering,' to wit, assembling printed papers in the form of a book or pamphlet for binding purposes. The defendant, one of the proprietors of the establishment, was present and in charge of the work and the employes, and among them were several other women. There is no pretext that the building was insecure, the light bad, ventilation defective, or the general sanitary condition deficient. In these respects, the deputy testified, 'It is the best factory of the kind in New York City.'

"The information upon which the defendant was tried and convicted charges a misdemeanor under section 77, article 6, entitled 'Factories,' of the General Laws Relating to Labor, in that he employed, permitted and suffered the said Katie Mead to work in that factory after nine o'clock at night on the date specified."*

Katie Mead, on the night of January 31, 1906, was not only a bindery hand. She was a representative of all the women employed in factories in

* New York State Department of Labor, Bulletin No. 30, September, 1906, p. 340 ff. People v. Williams, Court of Special Sessions.

New York state. The work that she did in the bindery that night after 9 o'clock resulted in "the first judicial construction thus far made in the United States of a statute prohibiting the employment of women in factories at night."* Three courts, in succession, declared the prohibition unconstitutional, and, as a result of their decision, Katie Mead and all other adult women in binderies or in any other factories of New York state may be "employed, permitted and suffered" to work throughout the night.

The reasoning of the courts is somewhat involved, but the importance of the decision in the history of factory laws in New York, and its immediate bearing on their present enforcement, makes full discussion of it desirable. The court declared that the issue was not the limitation of the working hours in a day or a week. "How long the woman worked on the day in question, how long she worked that week, or how many hours of labor she had contracted to perform on the night she was found working in the factory—none of these things appear. The sole fact before us is that a woman was employed in factory work for a few minutes during hours when the statute declares it was unlawful to so employ her." The justice believed that one of women's rights certainly was

"the right to contract for her labor and to work when and where she pleased without reference to the position

* Ibid., p. 336 ff.

Midnight in a Magazine Bindery

The Midnight Lunch Hour

of the hands upon the dial of the clock. . . . There is nothing in the prohibition of the section in question which indicates that its object is to promote the health or the public welfare. Had the statute been so framed as to provide that none of the employment of women for sixty hours a week or ten hours a day should be between 9 p. m. and 6 a. m., or had it provided that women might work only a limited time after 9 o'clock p. m. and before 6 o'clock a. m., if she was employed during other hours of the day, its object as a health regulation might be apparent. When, however, it is so drawn as to prevent an adult citizen from exercising her right to contract for employment, even for so limited a period as one hour during the prohibited time, it cannot properly be considered a health regulation."

The appellate division of the Supreme Court affirmed this decision but their vote was divided, two of the five justices dissenting.* Justice Scott, writing the majority opinion, declared that

"the opinion delivered by the learned justice who wrote for the Court of Special Sessions discusses the constitutional infirmity of that clause of the statute upon which the prosecution is based so satisfactorily that we adopt it as the opinion of this Court. . . . The provision under examination is aimed solely against work at night, without regard to the length of time during which work is performed, or the conditions under which it is carried on, and in order to sustain the reasonableness of the provision, we must find that, owing to some physical or nervous difference, it is more harmful for a woman

*New York State Department of Labor, Bulletin No. 31, December, 1906, p. 478 ff. People v. Williams, 115 App. Div.

work at night in binderies means too often permission to prolong the day's labor. Few binderies (not more than two or three) have regular night shifts for women, who begin work in the evening without having worked during the day. In a far greater number, girls who work during the day stay on through the night hours. Probably Katie Mead had been working since 8 a. m., although the evidence presented to the court showed only the single fact that she was found at work at 10:20 p. m. without regard to the length of employment preceding that moment. Some of the actual instances of overtime work cited in this chapter demonstrate that the prescribing of a definite rest period during definite hours of the night is essential to prevent the joining together of two working days at the stroke of midnight.

That the long periods of employment resulting from such a practice have disastrous effects on the health of women was pointed out by the factory inspectors of New York in their annual report as long ago as 1887.* "Inquiry among those females above the statutory age† who worked twelve and fifteen hours a day in printing offices, candy factories, woolen mills, and other manufacturing establishments," they wrote in that year, "elicited the information that the women who labor these long hours were more subject to fits of nervous

* Second Annual Report of the Factory Inspectors of the State of New York, 1887, p. 28.

† At that time the law applied only to women under twenty-one years of age.

prostration and debility than those who worked the normal day of ten hours; and, as a rule, at the end of a year, they would not have so much working time to their credit as those who were not so overworked." That the factory inspectors recognized the connection between a prohibition of night work and the regulation of the length of the working day, is shown by the fact that this statement of the bad effects of prolonged periods of employment was used in their annual report as an argument in favor of their recommendation that the employment of any woman, adult as well as minor, after 9 p. m. be prohibited.

The constitutionality of a law designed to prevent such prolonged periods of employment by limiting the hours of work of women to ten in a day was clearly affirmed by the Supreme Court of the United States in 1908 in the case of Muller v. Oregon. The argument for the law rested on "the world's experience upon which the legislation limiting the hours of labor for women is based," and counsel pointed out that no court can ignore facts of common knowledge, when deciding whether a statute is a legitimate exercise of the police power.

"The danger of long hours for women," wrote the counsel for the state of Oregon, in his summary of the statements of authorities in many nations,* "arises from their special physical organization taken in connection

* Supreme Court of the United States, October Term, 1907, No. 107. Curt Muller, Plaintiff in Error, v. State of Oregon. Brief for Defendant in Error, Brandeis, Louis D., pp. 18, 24, 28.

with the strain incident to factory and similar work. . . . Such being their physical endowment, women are affected to a far greater degree than men by the growing strain of modern industry. Machinery is increasingly speeded up, the number of machines tended by individual workers grows larger, processes become more and more complex as more operations are performed simultaneously. . . . The fatigue which follows long hours of labor becomes chronic and results in general deterioration of health." In affirming the constitutionality of the statute, the court said,* "The two sexes differ in structure of body, in the functions to be performed by each, in the amount of physical strength, in the capacity for long-continued labor, particularly when done standing, the influence of vigorous health upon the future well-being of the race, the self-reliance which enables one to assert full rights, and in the capacity to maintain the struggle for subsistence. This difference justifies a difference in legislation and upholds that which is designed to compensate for some of the burdens which rest upon her."

As progress is made in strengthening legislation regulating the daily hours, it is to be hoped that the necessity for a prohibition of night work will also be recognized by courts and legislatures. In 1906, 13 European nations recognized this need by signing an international treaty which did not emphasize the idea of prohibition of employment but stated the situation more positively by

*United States Reports, Vol. 208. Cases adjudged in The Supreme Court at October term, 1907. Muller Plaintiff in Error, v. The State of Oregon, p. 422. N. Y., The Banks Law Publishing Co., 1908.

providing for a rest period each night for women workers. Nothing in the New York decision of 1906 would prevent the possibility of a more favorable interpretation at some future time of a law technically correct in drawing and supported by evidence showing its necessity as a health regulation. Such a decision is urgently needed to strengthen the New York restriction on the hours of work of women.

The constitutionality of the law regulating the weekly and daily hours has never been denied in New York state, and the way is open for a better enforcement of this law. As a means to this end it is of urgent importance that convictions for violations should be followed by the imposition of fines in the magistrates' courts. Such a record as that of 1907 is discouraging to factory inspectors; in that year, 28 convictions were secured for violations of the sixty-hour weekly law, and in 27 of these cases the magistrates suspended sentence.* The result of this use of the suspended sentence, combined with a misunderstanding of the application of the court decision denying the constitutionality of the night-work prohibition, has been to give a wide impression that the statute limiting the daily and weekly hours of labor is a dead letter. On the contrary, an increasing number of court decisions in other parts of the country are in agreement with that of the United States Supreme

* New York State Department of Labor, Annual Report, 1907, Part II, p. 19.

Court in affirming the constitutionality of such legislation. Indeed, in 1906, more than a year before the Oregon decision, the Court of Special Sessions* in New York declared the sixty-hour law a legitimate exercise of the state's police power for the protection of the public health. An aroused public opinion is needed now to give life to the statute, and to insure more adequate protection for women in factories.

* New York State Department of Labor, Bulletin No. 31, December, 1906, p. 484. People v. Howe. See Appendix C, pp. 256–258.

CHAPTER VII

COLLECTIVE BARGAINING IN THE BINDERY TRADE

THE trade union movement is a vigorous one in the bookbinding trade, and bindery women in New York are active in it. They have formed an organization composed entirely of women, and managed by their elected representatives. Its purpose is to establish uniform, minimum standards regarding hours and wages, and to prevent unfair treatment of any worker in a union shop. It provides machinery for collective bargaining between an employer and his workers, not as individuals but as an organized group controlled by the votes of its members. The conviction behind this movement is that under present conditions of industry, unless there be a definite form of organization among the workers no individual protest of theirs against injustice will have any influence.

The bookbinding trade affords a clear illustration of the difference between the relation of the craftsman to his customer, and that of the obscure employe in a large establishment to the president of the corporation controlling it. It is still possible

to find a bookbinder, either man or woman, who works alone without employes and sells his labor to a purchaser without the intervention of an employer or a salesman. But while the craftsman still holds his own, arranges his hours of labor, and bargains approximately as an equal with the customer who pays him for his services, the bindery girl in the ordinary workroom represents a changed industrial order. Her position is a reminder that since the days of Grolier, or Roger Payne, the forces of industrial revolution have been at work relentlessly and inevitably, changing methods in the workroom, enlarging the number of employes, splitting up their tasks into minute processes, introducing mechanical contrivances, and making each worker merely a humble part of a large system. The employer who formerly bound books in his own workroom has given place to the corporation manager whose chief duty is to study the book market. He pays no more attention than is necessary to the control of labor conditions. This phase of the business is handled by a delegation of authority from manager to superintendent, from superintendent to foreman, and from foreman to forewoman. Furthermore, not only does the worker occupy an obscure place in this hierarchy of industry, but the bookbinding trade itself is but a branch, and that a subordinate one, of the publishing business.

The position of the worker and the impossibility of her modifying the conditions of her employment

are fairly well illustrated by the following description written by an investigator who secured work in a bindery.

"Reached above address at 8:10 a. m. Large red brick building, six stories high. Office on first floor. Group of girls, applying for work, stood around outside the railing. No talking. Several looked not more than sixteen or eighteen years; others older. Several came in after I did, and finally all together we numbered 13.

"A young girl from the office came forward and inquired, 'How many of you are experienced hands?' Nothing was said by the crowd but quickly there was a separation of the wise from the otherwise. She spoke a word or two to several and then told them to go upstairs. Five or six went. While waiting, I had taken advantage of vacant space and was next in order to the sheep. Girl looked me over.

"'Are you experienced?'

"'I have done pasting, though not exactly this kind.'

"'Go upstairs.'

"I climbed the three or four flights of stairs to the fourth floor and came upon the group which had preceded me. A woman was speaking to one of them at a time. The girl ahead of me had had experience as a gatherer. I understood that she was sent down to work. Then came my turn.

"'You have been here before?'

"'No.'

"'I thought I had seen you before. In what are you experienced?'

"'I have not worked in a bindery before but I have

had to do careful filing in an office and I think I could do gathering.'

"'Thinking and doing are very different things.'

"She spoke a word to one of the foremen.

"'You can't do gathering,' he said, 'till you've had experience.'

"'How can I get experience?'

"'You'll have to start at the bottom and do folding. It's piece work and girls who have worked at it can earn $6.00 to $9.00 a week, but you couldn't.'

"'But I want to learn.'

"'Well, you'll have to come at your own risk. Get a bone folder and be here at 8 tomorrow.'"

In such a case the girl may accept or refuse what is offered; she cannot modify the conditions. It is useless for an applicant for work to ask an employer of 200 women to bargain with her individually regarding hours of labor, the lighting of the workroom, or the position of the fire-escapes. Nor is a protest against too low wages likely to have any influence unless the employer is hard pressed for a worker in some particular process.

Even a group of girls in the workroom cannot successfully make demands regarding conditions of employment, unless they are part of a larger organization. A mere spontaneous uprising among them does not accomplish permanent results, and may only lead to their discharge. One girl described a "non-union strike" in a bindery in which she had worked. "The girls went out because they wanted more pay. It was a bad time for

there was very little work. All the girls, six or seven, walked out, except one. She was a foreigner and wouldn't have gone out for anybody. I told the others I thought it was better to wait until there was more work, but they wouldn't listen to me. We lost. The firm took on other girls."

In another non-union bindery a few girls tried to organize a protest against overtime work. They had been working late in the week preceding Christmas, and they did not want to stay through Christmas Eve, which happened to be a Saturday. Two of the girls went about the workroom asking the others to refuse to work overtime that day. The one who afterwards told the story agreed to the plan, but as she was feeding the folding machine she "could not hear what was going on." Meanwhile the other girls decided not to protest. Later in the afternoon the forewoman asked her if she intended to work overtime; she kept her agreement and refused. The forewoman dismissed her. She stopped her machine and told the other girls that she was losing her job because they had not kept their word. Two of them offered to leave, but she urged them to stay. "There was no use having three people out of work," she said. But the forewoman appeared again, and dismissed all three.

It should be remembered that in all these bargains, the state through its labor laws has already established a standard as a foundation for the agreement between employer and employe. In

these laws, already outlined, hours, sanitary conditions, and minimum age are defined. No manufacturer may lawfully employ a child under fourteen; no child under sixteen may work more than eight hours in any one day, or at any time except between 8 a. m. and 5 p. m. No employer may legally require a girl under twenty-one to work during the night hours. No employer may contract for the labor of any woman for more than fifty-four hours in a week. Even if only one person is in his employ, a factory owner must meet these requirements, and others regarding ventilation, lighting, and sanitation. But the state has nothing to say regarding wages, and its standard of hours is much below the trade unionist's ideal of an eight-hour day. The demand for a living wage and an eight-hour day is left to be voiced by the thousands of unions in the many trades organized by the American Federation of Labor, of which the International Brotherhood of Bookbinders is a member.

The International Brotherhood of Bookbinders was organized in Philadelphia in 1892, by bookbinders who had formerly belonged to the Knights of Labor. Its membership included binders of printed books and blankbooks, paper rulers, paper cutters, edge gilders, and marblers, and workers in all other branches of the bookbinding industry. The Brotherhood is now made up of more than 200 local organizations to whom it has issued charters on application of 10 or more persons

working in the trade. The largest of any of these local unions in the bookbinding trade throughout the country is the bindery women's union in New York, known as Local 43 of the International Brotherhood of Bookbinders.

Local 43 includes women workers in all processes of the trade except gold leaf laying.* It was organized in 1895, with less than 50 members. In 1906 it numbered 800, in 1909, 1400, and in 1912, 1600. Thus it has doubled its membership in six years. These six years have been the period of complete control of the organization by women officers. Early in this period, in 1907, a permanent office was opened at 150 Nassau Street, New York, and one of the women members was elected secretary-treasurer to give her whole time to transacting the business of the union. In 1911, the president gave up her work as sewer in a large bindery, and became a salaried organizer. The initiation fee is $3.00 and the monthly dues thereafter 25 cents. In addition to paying its regular per capita tax to the International Brotherhood, Local 43 meets from these dues the expenses of its office.

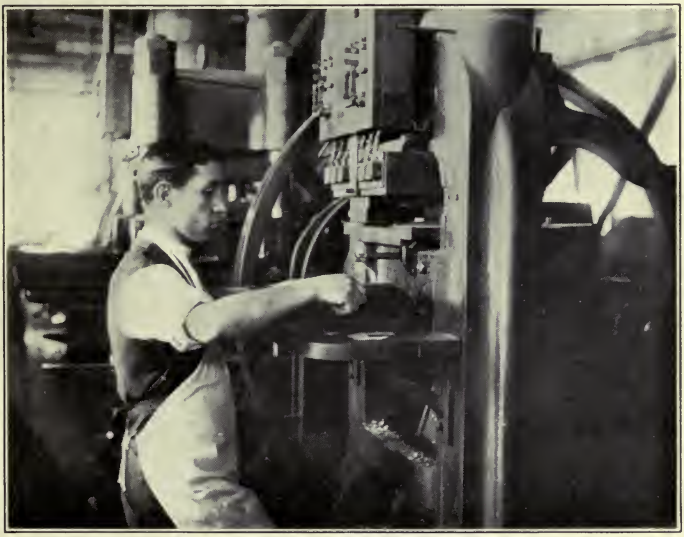
To those who think that trade unionism is synonymous with strikes and picketing and keeping another out of a job, a visit to the office of Local

* The gold leaf layers in New York are members of Local 22, which is made up also of men stampers, and is part of the International Brotherhood. After the convention of the Brotherhood in June, 1912, Local 22 was merged with Locals 1 and 11 in a new Local 3, but in this chapter the former number is retained.

43 would bring many surprises. With scarcely a strike in its history, this local, made up almost entirely of American-born girls, has continued its quiet, steady work, securing its aims by good business methods, by conference and discussion with employers, by give-and-take adjustments of difficulties arising in various shops, and by inducing employers to guarantee a minimum rate of pay for each process of women's work.

It is these local unions in the various communities which make trade agreements with employers. The international organization, especially in its biennial conventions and its trade journal, affords a means of discussion of interests common to all the local unions. It handles questions relating to co-operation with workers in other branches of the printing and publishing industry, and reënforces local efforts by the backing of its membership throughout the country. Its officers are elected by votes of the delegates from each local. The number of members in good standing, that is, those whose dues are paid, in each local, determines the number of votes to be cast by its delegates. The power of the central organization is strengthened by its control of funds. Four separate per capita taxes are levied by the Brotherhood, and must be collected and paid at regular intervals by each local. For the journal fund men pay 5 cents a month and women 2 cents a month; for the funeral benefit fund ($75) both men and women pay 5 cents; for the organization fund each of the

Gold Leaf Layers



A Stamper
(This man takes the cover after the gold leaf has been laid on)

men members pays 10 cents a month, and each woman 3 cents; for the defense fund, used in time of strike, the tax is 20 cents a month for men and 5 cents for women; making a total tax of 40 cents a month for men and 15 cents for women. The defense fund may only be used to sustain legal strikes; that is, those authorized by the international executive committee. To members participating in such strikes the general office pays benefits of $7.00 a week to a married man, $5.00 to a single man, and $4.00 to a woman.

The trade union label is one of the important tools for organizing workers in the various binderies. It is the same label as that used by printers and it signifies that the books or pamphlets on which it is stamped were manufactured in a union shop. To control its use in each community, and to discuss other common interests, Local Allied Printing Trades Councils are formed consisting of representatives of the unions of bookbinders, printers, photo-engravers, stereotypers, and electrotypers. These councils also have an international association. It is their purpose to arouse public sentiment in favor of the label, particularly on public documents and books used in the public schools, thus frequently inducing employers who are seeking such public contracts to accept union organization in order to have the right to use the label when customers request it.

Probably the most important event in the history of the International Brotherhood of Book-

binders, one in which Local 43 took an active part, was the demand for the eight-hour day. It was made simultaneously on October 1, 1907, by local unions throughout the country and is an excellent illustration of the relation of these locals to the international organization.* As early as April, 1907, the executive council of the International Brotherhood, meeting at Columbus, Ohio, adopted this resolution:

"Resolved. That this Executive Council declare for the eight-hour workday on October 1, 1907, and that the referendum be asked to ratify this action; the vote to be in the hands of the General Secretary on or before May 30, 1907."

News of this decision was immediately sent to all members by means of a circular addressed to local unions Nos. 1 to 174, for ratification not by each local as a whole but by referendum vote by individual members. The result showed 4,906 votes in favor of the demand, and 1,758 opposed. The next step was to direct each local to send notices to the employers of their members, asking for a conference to discuss the inauguration of the shorter workday on October 1, the date set by the executive council. Thus the demand represented not an impulsive action, but a carefully planned move ratified by a large majority, with due notice to employers. In some sections of the country

* A full account of the campaign was given in the *International Bookbinder*, June, 1908, the trade journal published by the union.

the fight was a long one, but in New York only two or three firms finally refused to grant the reduction in hours. Against these a strike was ordered.

It was at this time that an interesting organization of employers was formed in New York, as the outcome of these conferences with local unions. This organization is called the Bookbinders' League and its purpose, as stated in its constitution, is "to discard the system of making individual labor contracts and instead to introduce the more equitable system of forming collective labor contracts." Membership is limited to those who own or manage union binderies within a radius of fifty miles of the City Hall of New York. These employers planned to enter jointly into an agreement with the bookbinders' unions, instead of making as many separate contracts as there are firms, and they aimed also to establish committees for discussion and conciliation of difficulties, and to insure arbitration of matters which cannot be settled by mutual consultation.

The first subject for conference was the eight-hour day, and an agreement was signed by the Bookbinders' League and each of the local unions of New York City, providing that after November 18, 1907, the hours of labor should be forty-eight per week at the scales of wages then prevailing. When overtime should be necessary employes might work an additional six hours in the week with not more than three extra hours in any one day, at the same rate of wages, but any

more overtime must be paid for at time and a half,—which means the day rate plus 50 per cent. It was agreed that after a year from the following January, all overtime above the forty-eight-hour week should be paid at the rate of time and a half. Provision was made for night work by agreeing that union binderies might run a second shift of forty-five hours a week at the same rate as that paid to day workers. A clause was inserted which provided that union members should be given the preference in all cases where positions were open, but that if the unions could not furnish workers the employer had the right to engage non-union men or women.

This agreement was signed by the six local unions in New York and by the seven firms that were charter members of the Bookbinders' League. The unions then sent copies to all other firms, not members of the league, asking them to comply with the provisions regarding hours. With few exceptions, the agreement was accepted and the possibility of a widespread strike in New York was averted.

In other cities, greater difficulties were encountered. Almost two years later the president of the Brotherhood in an official letter to the *International Bookbinder* wrote that a strike was still in progress in Akron, Ohio, but that elsewhere the eight-hour day had been won. The total cost of the struggle in all sections of the country was more

than $200,000,* and this was paid by an assessment on all locals, even those that had secured their demands without a strike. Occurring at a time of widespread industrial depression, it was a severe test of the loyalty of the members. Members of Local 43 paid extra assessments during that period for the eight-hour workday fund, the greater part of which was used outside New York.

This account shows how the unions throughout the country, led by the executive officers whom they elect to control the international organization, may unite in a simultaneous demand. It shows also the way in which the local unions negotiate with employers in their own communities, in order to secure certain conditions agreed upon by the local unions in all other communities. In case a prolonged strike is necessary, a bindery girl in New York pays a regular tax to help the workers in another state secure the eight-hour day which may have been granted in her place of employment nearly two years before.

When these demands have been won their enforcement must be watched by the local unions. The locals are responsible also for negotiations regarding many matters which are not made the subject of international agreement. This is illustrated by the additional contract signed by the locals in New York and the Bookbinders' League on the same date on which they agreed to grant the eight-hour day in their binderies. It is so im-

* *International Bookbinder*, March, 1909, p. 97.

portant as a peace protocol that it deserves full quotation.

"The Bookbinders' League of New York and Local Unions Nos. 1, 11, 22, 43, 77, 119 of the International Brotherhood of Bookbinders, being desirous of entering into an agreement for the purpose of maintaining an era of peace for their mutual advancement and prosperity, do hereby agree in all instances to consult by committee, trade court, or otherwise, and to conciliate if possible any controversies, disagreements, or misunderstandings, and if impossible to arrive at an amicable understanding, then and in all cases to submit to an arbitration of such matters—the committees being composed of an equal number of employes and employers who shall appear and state their case before the arbitrator, who shall be elected by mutual consent—and that each body hereinbefore stated shall upon the signing of this agreement appoint a committee to arrange a schedule of prices and hours which shall be known and published as the Bookbinders' League of New York Scale of Wages, and also that the Locals Nos. 1, 11, 22, 43, 77, 119 of the International Brotherhood of Bookbinders shall be and now are considered members of the Bookbinders' League of New York for the purposes for which it has been organized.

"It is also understood that any arbitration must be settled in three months from the time of the submission to arbitration.

"In accordance with resolution of Locals Nos. 1, 11, 22, 43, 77, 119 of the International Brotherhood of Bookbinders this agreement will be in force for one year from date."*

* Dated New York, December 31, 1907. New York Department of Labor, Bulletin No. 36, March, 1908, pp. 26–27.

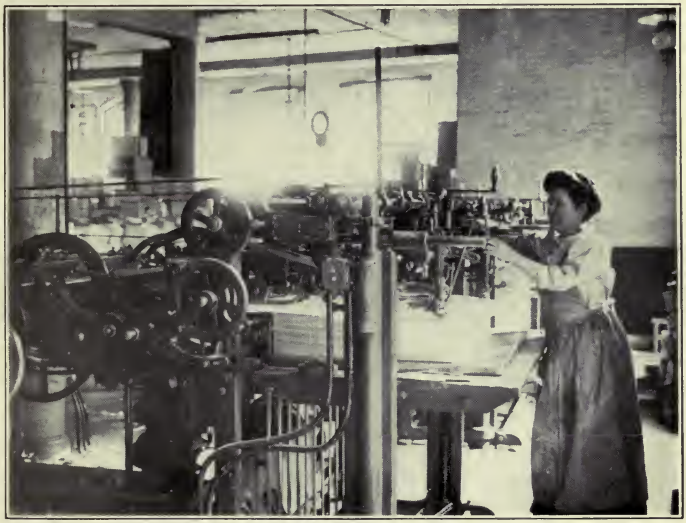
In accordance with this plan joint committees were appointed for conference and conciliation, and these committees have succeeded in settling various questions in the shops allied with the League. For the bindery women in New York the agreement should have led also to the ratification of their scale of wages, already prevailing in several union binderies. Unfortunately this plan to adopt a uniform wage scale was never carried out by the Bookbinders' League, except in the case of Local 22, which, as has been explained, includes stampers (men) and gold leaf layers (women). For gold leaf layers the minimum rate continued to be $10 a week. In January, 1912, by another agreement with the Bookbinders' League and other firms this was increased to $11.

Local 43, through negotiation with individual firms, had already adopted a scale of wages, July 1, 1906, which still prevails in 1912. Whether payment shall be by piece or by week is optional with the employer, and the wage scale specifies both the piece rate and the week rate. For example, for machine folding the rate for week work must be $10, but for piece work the price per 1,000 is specified for 12mo, 16mo, and 24mo, for double sheets, and inserted sheets. In connection with each process is a clause reading, "All extra work, special prices upon mutual agreement." Thus, while aiming at a rate of $10 a week for all experienced workers, it is evident that negotiation is

necessary to determine the rate for books of exceptional size or quality of paper.

Obviously, from the nature of the work, it is more difficult to interpret an agreement regarding rates of pay than to enforce an eight-hour day. Books are of many different sizes, and their sheets are of various grades of paper. Under the piece-work system it is a difficult task to maintain a fair rate. When the price is not definitely specified in the printed wage scale, it must be determined by some such method, for example, as that described by the superintendent of one of the union binderies. According to this plan, suggested by the officers of Local 43, three girls are put to work at the same task, one quick, one slow, and one of medium speed. They are timed, and their combined output is divided by three to determine the average. The rate of pay for piece-work is then determined so that with this average output the earnings would be $10 a week. The quick worker will earn more. The slow worker will earn less. In either case the union makes no objection. The superintendent who described this method cited the case of a gatherer employed in his bindery, who earned $22 a week, while the girl next to her, paid at the same rate per piece, earned $7.00. He considered this a sufficient answer to the objection that trade unionism always and invariably keeps the good worker down, and forces up unduly the earnings of the incompetent. The superintendent of another union bindery said that he considered it a profitable plan

Drop-roll Folding Machine



Automatic Folding Machine

to pay the most efficient worker higher wages than the minimum scale demanded by the union.

Besides hours and wages, other important subjects are included in the scope of Local 43's activities. These are the conditions of entrance to union shops, including the regulation of apprenticeship and provisions for admitting experienced workers to the union, certain restrictions as to the transfer of workers from one process to another, the granting of legal holidays, attempts to mitigate the hardships of slack season, and methods of adjustment in cases where hand workers are displaced by the introduction of machines.

The subject of apprenticeship has been discussed by the International Brotherhood, but the discussion has concerned boys primarily rather than girls. Local unions have been urged to introduce a system of indenturing apprentices, and to limit their number in proportion to the number of experienced workers in each shop.* Such an arrangement, say the international officers, is of value to the employer since it insures the continued service of the apprentice during his term, usually four years, instead of permitting him to go to another shop before the employer who is training him can reap any benefit from such an investment. For the trade it is an advantage, because it counteracts the tendency, created by the introduction of machines, to make specialists in one branch. The effect of

* See Report of United States Industrial Commission, 1901, Vol. XVII, Part I, p. li.

this specialization on the wage scale was described by the secretary of the Brotherhood in his report to the Industrial Commission in 1901.* It "overcrowds our trade with incompetent mechanics," he wrote, "who, in many cases, when out of employment, will accept a position at a reduced rate of wages just to obtain work. Such a man not only drags himself down financially, but others as well."

The description of the work of women has already shown the same danger of specialization in their tasks. To counteract it, Local 43 has made agreements with union firms limiting the proportion of apprentices to one in every group of 10 experienced women workers in a shop.† No girl under sixteen years of age may become an apprentice. The term is approximately one year. During that time the experienced workers are expected to teach the learner all the hand processes, but she is not permitted to operate a machine, doubtless because she might thus reduce the rate of pay for machine operators to the level of learners' earnings, and because in acquiring facility in that one process she might learn nothing else. The minimum weekly wage for an apprentice is $5.00, with an increase of 50 cents at the end of six months. This rate of wage represents a recent union gain. In 1906 the rate for learners was $3.00. When

* Ibid., p. 110.

† The superintendent of a union bindery said that this was not an arbitrary restriction but a natural one; a larger proportion of learners could not be properly taught.

sufficiently experienced, the learner becomes a member of the union, and receives the union scale of pay. None but competent workers are admitted to membership, the executive committee of Local 43 passing upon each application.

It is in the matter of apprenticeship that Local 43 differs markedly from Local 22, to which, as has been stated, girls employed in gold leaf laying belong. These girls are in the finishing departments of the binderies and usually have no direct contact with the other bindery women. Young girls may be employed in this department to "size and clean" the books, but they may not touch the gold until formally admitted to membership in the union as apprentices. The term of apprenticeship is three years after admission. The wage at first is $5.00 with 50 cents increase every six months, until the end of three years when the minimum wage is $11. The gold is so precious that employers are quite willing not to permit inexperienced girls to handle it until they have done enough preliminary work in the department to be eligible to apprenticeship. About 200 women gold leaf layers are members of the union.

In Local 43 admission to membership is not confined to girls who have been apprentices in union shops, but includes also experienced workers in the various processes, who have not before been union members. For these the conditions of joining are the same as for those who have just completed their apprenticeship. Each application is

voted upon by the executive committee, serving as the elected representatives of all the members. The union welcomes additions to its ranks and does not make any attempt, as is often charged against such organizations, to restrict the number of workers in the trade. Its agreement with employers, already quoted, permits the employment of non-union workers when the union is unable to furnish workers who are enrolled in its membership. If these non-union girls are merely temporary hands they may not be required to join the union, but if they are permanently employed they must become members within two weeks after beginning work in a union shop.

To facilitate the carrying out of the employers' agreement to give the preference to union members, one of the most important duties of the secretary-treasurer is to maintain an employment registry. A list of unemployed members is kept up-to-date, and when union employers need workers they are expected to notify the union office. The workers needed for a particular process are recommended impartially according to the order of their application. This system not only serves as a convenience to employers but helps to relieve the hardship of irregular employment for the workers.

As a further remedy for slack season, it is arranged in some union shops that when the work on hand is insufficient for the normal force it shall be divided so that each may have a share. Thus unemployment for an indefinite period is avoided.

On the other hand, as a remedy for overwork, the union demands a higher rate of pay for overtime, and double price for employment on Sundays or legal holidays. On only one legal holiday—Labor Day—is work forbidden by the union.

One more requirement made by Local 43 is important. It concerns the transfer of a worker from one process to another. In the printed scale of prices the following paragraph appears:

"Any member may be assigned work in any position other than the position in which she was engaged, in case of emergency, and if such emergency position carries with it a higher scale than she has been receiving, she will receive while filling that position the higher scale. Or a member sent to fill an emergency position at the lower scale shall not be reduced to the lower scale."

The reason for this provision, obviously, is to protect the worker against a reduction in wages because of transfer to another process, and, on the other hand, to prevent the lowering of an established rate for any process by putting a less well-paid girl to work at it. In the same spirit, the union attempts to protect the workers against loss when new machines are introduced. For example, in three union binderies in New York five women, who formerly were hand gatherers, are successfully operating the gathering machines, the mechanism of which is said by employers to be more complicated than that of any machine operated by men in the trade. The tendency is to employ

men operators for this work, but in each of the cases cited the women's union secured the opportunity for a woman at the same wage that a man would receive, $18 a week.

It is in making such adjustments that the constructive business ability of Local 43 has been shown. A shop stewardess is appointed in each workroom. The workers complain to the stewardess in case there is any violation of the agreement regarding hours, wages, or other conditions. If she fails to adjust a grievance through conference with the foreman or forewoman, the union officers take it up, and if the difficulty prove serious, it may finally be referred to the international executive council. Usually the adjustment is made in the workroom. If it cannot be adjusted in any other way the local, with the approval of the international officers, may order a strike, and the expenses of such a contest are borne during the first two weeks by the local, and afterwards by the international defense fund.

Local 43, as has been stated, has 1,600 members, and the women members of Local 22, the gold leaf layers, number about 200. The total number of women in the trade is about 6,000. Out of more than 200 shops counted in this investigation, those in which the women are organized number about 40. Nevertheless, the union shops are important ones, and the union influence is greater than their numbers would indicate,—a fact demonstrated by the rapid extension of the

eight-hour day to non-union shops after it had been won by union efforts.

Workers are often content to reap the benefit of unionism without sharing in its burdens, and there are employers who see in this fact the possibility of keeping their employes out of the union by maintaining union conditions. Again and again employers say, "We have union conditions and don't bother with the union." As in many other trades, one hears employers who are opposed to dealing with an organization of their workers express their opinion in such phrases as, "I won't be dictated to," or "I wish no interference from the workers in running my own business." It is significant that the superintendent of an establishment which has had long experience with trade unions in several branches of the printing industry expresses the conviction that only by frank conference and discussion, such as the union makes possible, can an employer hope for real efficiency in his workroom force. He pays a high tribute to trade unionism for women, especially as he has known it in the methods of Local 43.

The indifferent attitude of some women toward unionism is illustrated by a letter from a bindery worker to whom an investigator had sent a booklet of information about the union. "I do not belong to any of the unions," she wrote, "as I don't think it necessary. We are not obliged to belong yet. At the same time, it is nice to be up-to-date and prepared for the occasion."

This girl worked in a shop where some school books are bound. Her implication that she might be obliged to join was due to the fact that pressure is often brought to bear to have the union label put on books which are public property. That the agitation for the use of the union label is not more of an aid than it actually is to the organization of bindery women is due in part to the indifference of men in the trade to the welfare of the women. Some of them are quite content to consider a shop a good union place and to permit the use of the label on its products, if the men are organized, even when not one of the women is a union member. Furthermore, a union printer will sometimes put a label on a book, although he has had it bound in a shop where neither men nor women are union members. This defeats the purpose of the label as a means of unionizing all the workers in the shop which uses it.

Employers agree with the women unionists that the growth of Local 43 has been due far more to the efforts of the women than to any co-operation on the part of the men. Indeed, in disputes over borderline processes, such as the operation of the gathering machine, the men have been, as one employer expressed it, "unbelievably hostile to the women."

To judge of the results of trade unionism by comparison between union and non-union shops is never fair, since, fortunately, betterment of conditions usually has an influence extending beyond the

establishment in which it is first secured. Indeed, the trade unionist sometimes declares openly, to the amazement of the public, that the improvement of conditions is of less importance to him than recognition of the union,—by which he means putting into operation the machinery of the collective bargain. Conditions in union binderies in New York, however, prove that the bindery women's union is an important factor in improving the conditions of women's work in the trade. In regulations regarding the training of learners, in the shortening of the normal hours below the limit which the state has been able to establish by legislation, in the gradual enforcement of a minimum wage scale, and in the protection of individual women against unjust and unfair treatment, it has accomplished results more important than any yet secured for this trade through legislation.

CHAPTER VIII

TEACHING GIRLS THE TRADE

CURRENT discussions of industrial education are emphasizing the fact that the community through its public schools is responsible for developing the efficiency of the workers in its industries. When these discussions are based not on general theory but on concrete knowledge of such conditions as prevail, for example, in the bookbinding trade, the real difficulties in the way of meeting this responsibility become clearer. For more discouraging than the lack of skilled workmen, frequently deplored in America, is the lack of demand for skill in the old sense of power compounded of manual dexterity and intelligence. Efficiency in a manual occupation is made up of three elements, brain, hand, and time, but it is the change in the relative importance of these three which is at the root of the present baffling problem of industrial education.

Of this change, women's work in bookbinding is an excellent illustration. To plan the binding of a book from beginning to end, to have margins of the right width, to sew with the right sized thread for the right weight of paper, to design an appropriate

cover expressive of the spirit of the text, to choose the proper leather, and to treat it scientifically,—to neglect no detail which belongs to a solid, substantial, appropriate piece of work, requires a high order of brain and artistic ability. But the girl who folds the sheets in a modern bindery is not asked to choose the paper, or to plan the width of the margins, and very probably she will never see the cover of the completed book. She is required to fold so that the printing on one page will exactly coincide with the printing on the page which faces it, thus insuring even margins after the cutting machine has done its work; and she is expected to work fast. As the manual element is reduced to its simplest terms,—mere rapid repetition,—the brain element controlling the hand is not at a premium. For feeding a machine, knowledge of mechanical devices is desirable but not essential. Bookbinding for women is a skilled industry so organized as to be carried on in many departments by unskilled workers. It does not require the efficiency of the craftsman, and therefore, it does not demand of its novices that they meet the test of a thorough training designed to develop the sort of intelligence in which educators are interested.

The restrictions on entrance to the trade are not severe, and they do not keep out workers who may not be adapted to the demands of the occupation. They are three-fold,—the law regulating the employment of children, regulations prescribed

by the trade union, and rules adopted by individual employers.

The New York state law, governing bookbinderies in common with all other factories, forbids the employment of any child who has not yet reached the fourteenth birthday, and requires that all children between the ages of fourteen and sixteen be provided with employment certificates. To secure the certificate, the child's age must have been proved satisfactorily, she must have reached the required grade in school (prescribed as 5B in New York City), and have attended at least 130 school days in the twelve months preceding her fourteenth birthday, or the date of her application. The trade union already described names sixteen as the minimum age of apprentices, and limits their proportion in relation to experienced workers in a ratio of one to 10. Employers' methods vary widely. Of 207 who stated a definite policy regarding learners, 142 are willing to employ them, while 65 engage only experienced workers. Of the firms willing to employ learners, 116 gave definite information regarding the minimum age: 54 will employ no girls under sixteen years of age, three preferring workers seventeen years old; and 62 will employ girls of fourteen or fifteen. No definite educational requirements are found. Only one employer expressed a preference for grammar graduates.

Thus the barriers at entrance are not high enough to prevent the employment of a young girl of four-

teen, who has selected the occupation with no idea of its future opportunities for her, but merely because she happened to notice a bookbinder's advertisement for learners the day she secured her working papers. She does not know then that a learner in the bookbinding trade is not necessarily an apprentice practicing tasks which will lead to more highly skilled work; she is ignorant of the fact that she may be merely an unskilled worker needed for certain processes which do not prepare her for other parts of the trade. The two types of learners may be working side by side in the same bindery. As the training is often so casual and differs so markedly for different girls, it can be accurately described only by relating the comments and experiences of individual workers.

"I'm never laid off, because I can turn my hand to a good many different things," said one girl who considered herself an all-round worker, and took pleasure in telling how she had learned her trade. She went to work in an edition bindery when she was sixteen years old. Her sister was also a learner there. "When we first began," she said, "we were waiting on everybody in the place." When the feeder of one of the folding machines stopped work at 5:15, this girl would stay until 5:30 to practice operating it. "Most girls," she said, "won't stay after hours to practice. It's a girl's own fault if she doesn't learn. If they put her on cutting off, she ought to watch the machine and then she'll learn to sew. The forewoman in

our bindery teaches a girl if she's bright. Of course, if she isn't it doesn't pay to bother with her. But I'll admit it's discouraging when you first go into a bindery. You must have such a knack about everything. And you must be strong and not nervous, for you're liable to be hurt by the machines. The work they give learners, like knocking up, is heavy, and you're on your feet all day long." Her main work was knocking up the folded sheets. Gradually she learned to feed the point folding machine and that became her specialty. It was necessary to learn hand folding, in order to detect errors in the work of the machine. She learned to gather by hand and to size and clean the books in the gold laying department, a process not usually assigned to "general bindery" girls. She learned to examine and to wrap the finished volumes, and for a while was the head wrapper. The method of learning was obviously not systematic. At first the forewoman showed her how to do the work. Then she learned by watching and by seizing every opportunity to practice. She has never had a chance to paste, to collate, or to operate the sewing machine, yet she is considered an experienced bindery girl.

"The girls show you," said another, who had begun work at the age of sixteen, before graduating from the public school, and had been employed for four years in the same edition bindery. She had "jogged" or "knocked up" the sheets folded by machine, "cut off" books from the sewing ma-

Hand Folders

The Point Folding Machine

chine; folded by hand; "pulled out" sheets from the gathering machine; and finally, as her main line of work, operated the wire-stitching machine. Occasionally she had gathered and pasted by hand and sewed by machine, but not often enough to learn these processes. The time it takes to learn "depends on yourself," she said. "If you don't sit yourself down at the machines and try them, no one else will ever sit you down at one. And you have to be willing to do work that you don't like." Stories like these, repeated many times by workers, gave the impression that the learner herself was the only one interested in her training.

Some of the girls occupying the best positions in the trade have been strict specialists. An operator of a sewing machine, who has been a bindery worker for four years, understands no process except sewing. As a beginner she cut off the books after they were sewed, and thus learned the working of the machine and became an operator. In contrast to her experience, her aunt who has worked six years in the trade has never operated a machine. She has straightened sheets, folded and inserted by hand, and wrapped books. She and her niece work in the same bindery, but neither could take the other's place without becoming a learner again.

Even though the training received by these women has been neither systematic nor thorough, they have all been learners in the sense of having before them the possibility of advance, as they be-

came more expert in the processes which they had learned. Another type of learner is the inexperienced worker, employed in busy seasons to do unskilled work which leads nowhere. Sometimes one of them passes on to a more skilled process. Many of them are casual workers, whose presence serves to complicate the problems of the bindery trade. As a group, they may be called the untrained bindery workers. "We take on learners for temporary work," said the owner of a large pamphlet bindery. "Then we weed them out." This is the meaning of such advertisements as these which appear frequently in the newspapers: "Ten bright, quick girls; $4 weekly. Apply Saturday morning, ready to start work." "Wanted: 30 girls as learners: must be over 16: $4.50 weekly. Call ready to work." In encouraging casual work, the bindery trade must be held in some measure responsible for creating drifters among working girls in New York. Securing no foothold in the bindery trade, they wander from one occupation to another.

Two examples show trade histories of this kind. One girl folded patterns one year, earning $6.00 a week; worked in a department store one week, earning $3.00; folded by hand in a bindery three months, earning $5.00; and then was "laid off—slack"; folded by hand in another bindery two weeks, at $6.50, "laid off—slack"; idle four to six months; folded and inserted circulars in the mailing department of a publishing house three weeks, a

temporary job for a wage of $7.00; folded pamphlets, edge work, at $1.00 a day, but "didn't like it" and stayed only two days. Her record reads: "Has worked at other places for a short time. She leaves home about 6:45 a. m. to answer advertisements. She and her mother live alone in a furnished room and she is greatly in need of work. She would like to stay in the bindery trade if work were steady."

Another began work as a cash girl, working two months for a weekly wage of $3.50, "laid off—slack." She then worked one year in a magazine bindery, helping the operator of the wire-stitching machine, and earning from $3.50 to $4.00. She left "for a better place." She "took money out of tissues" in a bank note house a year and a half, earning $6.00 until she was "laid off—slack." She packed candy two months during the Christmas rush, earning $5.00 per week. Then she was out of work ten months. She returned to pack candy one month at $5.00, and was again "laid off—slack." She folded and pasted pamphlets two weeks in a printing office, where the bindery work was only temporary. She took sheets from the gathering machine in a magazine bindery, earning a wage of $1.00 a day only eight days in the month. She had worked five years altogether, and her maximum earnings in any week were $7.00.

Such casual work seems to be most frequent in pamphlet binderies. The opportunities for beginners, however, are even more restricted in maga-

zine binderies, with their periodical rush of work and their extensive use of machinery. In one magazine bindery, "learners" are employed to separate the printed sections when they have been folded together. This is called outserting. Sometimes the learners stack the folded sheets in bins, where they are kept until needed for the process of gathering. Sometimes they pull out the gathered sections from the machine. Five of the six magazines which are bound in this shop are folded on the printing presses, so that folding machines are needed for only one periodical, and hand folding is rare. No pasting, no sewing, no gathering by hand nor collating is necessary. The forewoman described two learners who began work there eight or nine years ago at $4.00. They learned to operate the wire-stitching machines, and are now earning $13 piece work. "They're among the fortunate ones," she said. "I can't teach all my girls wire-stitching; there are only 16 machines." She is one of those who spoke of the changes in the bindery trade, saying, "I'd never advise any relative of mine to go into it."

Workers and employers generally agree that an edition bindery is the best place for learners. The work is more exact and careful than in pamphlet binding. But in this branch of the trade no definite plan seems to have been developed except in union binderies, where the experienced workers feel a responsibility toward apprentices, and are interested from the trade union point of view in

preventing premature specialization. This is the case in one of the edition binderies frequently described as "a good place to learn." The number of apprentices is limited, according to the union standard, thus preventing the encouragement of casual employment. "If we took more than that," said the superintendent, "we could not teach them properly." The minimum age is sixteen. No written agreement is made on either side, but according to the policy of the trade union, learners are expected to stay until they have become experienced, thus enabling the employer to be reasonably sure that they will not leave before they begin to make returns for the trouble of teaching. "If a boy should leave us during his apprenticeship," said the superintendent, "and go to another union shop, we could prevent his working." The rule for girls is less rigid, and apprenticeship less formal. That methods of training vary even here is shown by the comments of several workers who learned the trade in this establishment.

"They take only a few apprentices here," said one girl. "Then they are sure to teach them. But not every girl learns the whole trade. Some do only hand folding, some do only sewing, others know all the branches. I never learned to sew by hand or by machine. The girls on the sewing machines don't want to have too many girls learn their trade." She knocked up, counted, carried and "drew off" from the whip-stitching machine. As a learner she received $2.50. This

was ten years ago. Her wages were increased 50 cents every six months, until she received $5.00. Later her principal work was operating the wire-stitching machine, for which she was paid, by the piece, from $10 to $15 a week. Later still she helped to clean and repair books, cancelling soiled sheets and pasting, so that "no one could tell they had been repaired."

"First I was straightening up the books for the wire-stitching machine," said another. "Most learners knock up for the folders. Then for two days I was on the machine for pasting covers on a Sunday school journal. Then I wanted more pay, so they said they'd try me on other work, and I knocked up for a folding machine. There were two boxes to empty, and my pay was $4.00. Then they gave me work on the gathering machine, and afterwards taught me hand folding. You can't make out on that. Two old ladies do it. Afterwards I was put on piece work, inserting, hand folding, and outserting. Then I did hand pasting, because the pasting machine broke. When I had learned I made up to $8.50 piece work."

Three or four others described their training in this bindery. One had been a box girl for a year, and knew no other process. Her sister learned within the first year hand work,—pasting, inserting, gathering, and collating. Another began her career by jogging the sheets to prepare them for the wire-stitching machine. Later she became a wire-stitcher. Sometimes she did hand work,—

folding, inserting, and covering. She had tried to learn to use the sewing machine by occasional furtive practicing "when the other girls were making tea," but she was far from becoming a sewer,—the part of the trade which most bindery girls prefer. Thus, even in this large bindery, with its reputation as "a good place to learn," chance seems to control the training of the apprentice.

Many experienced workers say that large establishments do not give so good an opportunity to learn as do small shops. "In the big binderies each girl has her own work, and the new ones don't get any chance. They teach you one thing and keep you at that." On the other hand, the training received in small establishments may have disadvantages. A bindery as well as a worker may be a specialist, and in such specialized workrooms a learner's opportunities will be even more restricted than in a large bindery with its subdivision of work. "Our workroom is not a good place for learners," said a woman employed in a small pamphlet bindery. "We haven't any machines. We do only hand folding and pasting and inserting." Larger places give the advantage of a wider choice. "I watch the learners," said a forewoman in charge of 150 workers, "and when I see that a girl takes to one process more than to another, I teach her that."

Employers in the bookbinding trade are generally rather indifferent toward the problem of training women workers. A few prefer to employ the

inexperienced in order that they may train them to do the work according to the special methods of their own workrooms. Only in this way, they declare, can they secure efficient service. Others, however, cite many reasons why they will employ none but experienced hands.

"We bind only one weekly periodical. We have no miscellaneous work to give to learners."

"Our season lasts six to eight weeks at a time. We couldn't get anybody to teach learners. It would take too much time."

"We have no time to teach and the girls haven't the patience to learn."

"It is a poor proposition to take learners. As soon as they know anything, they leave."

"As soon as boys and girls get a little smattering of experience, they want to go somewhere else where they can get more money. They don't care about learning the trade, and they spoil a great many sheets."

"We can't bother with learners. Rents are too high. Sometimes we take inexperienced girls, 'kids' we call 'em, for extra orders and keep them about two months."

"We do not like to take learners. We'd prefer to have them learn in a small establishment where they have more time to teach."

"We haven't time to teach," said the owner of a bindery where three girls were employed.

"We can't take learners. Every worker must count in so small an establishment."

"I'm too small to take them. I haven't the capital. I have to take girls who know how to work, and who can get my orders out in the shortest possible time."

"We have not the floor space."

"It's not practicable to take learners with so much competition as there is in this business. They spoil the work. And then most of it is done by machinery. It takes time to learn how to manage a machine."

"In these days of short hours, we can't curtail production by teaching learners."

"All our work is rush work. We use machinery and have no time for learners."

Thus, conditions in the trade complicate the learner's problem. Irregular employment, specialization, rush work, the piece-work system, changing methods, and the increasing complexity of machinery, all tend to discourage the inexperienced worker, and to make the expert less inclined to take time to teach. As a result of these influences, two important problems of training are characteristic of the bindery trade; the problem of the specialist in a task which makes small demands on the worker's intelligence, and the problem of the untrained, unskilled casual worker. For the community to discharge its responsibility toward these workers, as the advocates of industrial education demand, will be no easy task.

This responsibility for the education of workers begins, of course, when the future worker is a child in school. A large majority, 89 per cent of the bindery girls interviewed, have attended school in New York, 56 per cent the public schools, and 33 per cent parochial schools. Only 2 per cent stated that the last day school attended was in a foreign

country, and 3 per cent had been to school in some section of the United States outside New York. Six per cent did not report. Only 10 per cent had stayed in school until they were sixteen, while 67 per cent left at the age of fourteen or younger, and 20 per cent left when they were fifteen. Three per cent did not report. The group of course includes those who went to work several years ago, before the present provisions of the child labor law were operative. Of those who attended public schools in New York only 9 per cent graduated from grammar school, and none had gone to high school, while 65 per cent had left while in the seventh grade or earlier.

Fuller information about the previous schooling of bindery girls was secured from another investigation, made by the Committee on Women's Work, in the public evening schools in Manhattan, Bronx, and Brooklyn in 1910–11. In the course of it, girls in these schools filled out record cards giving detailed information about their previous training in day school. Among these cards were the records of 144 bindery girls. The results* shown are the more interesting as they can be compared with the facts for other working girls, who answered the same questions.

Among the girls who named bookbinding as their occupation a very large proportion, 96 per cent, reported that the last day school attended was in New York, 62 per cent naming public schools and 34 per

* For tables see Appendix B, pp. 250–253.

cent parochial or private. Nearly half, 45 per cent, had attended school eight years, and 25 per cent had remained longer, a better showing than for girls in all manufacturing pursuits grouped together. Sixty-four per cent left at the age of fourteen or younger, and only 10 per cent stayed in school after the sixteenth birthday. Although eight years is considered a sufficient time for the "normal child" to graduate from the elementary grades, 70 per cent of these bindery girls had failed to graduate. Measuring their progress in school by the average time taken to complete one grade, allowing one year for a grade, only 21 per cent of those who received all their school training in New York public schools were normal, 9 per cent were rapid, and 70 per cent were slow, compared with 59 per cent slow among girls in all trades. Not only has their schooling been brief, but for some reason they have not kept pace with the curriculum. Another fact of interest was their preference for manual work in evening school; 53 per cent had chosen such classes.

These figures show that the schools are handicapped by too brief a contact with these girls, that they become workers at an age when they cannot be expected to develop the skill of an adult craftsman. Too early a start in an occupation may be equivalent to a false start. It may condemn a worker to inefficiency who might later have been more capable of directing her own progress. This is the first step in industrial educa-

tion,—to keep the children out of industry until they are equal physically, at least, to its demands.

Other questions, however, are being asked concerning the desirability of definite training in processes of work either in preliminary trade schools or in continuation classes. As an example of the problem involved in this last phase of industrial education it is worth while to outline the information gathered by the Committee on Women's Work at the request of a member of the Board of Education of New York. The inquiry was made for the purpose of answering a specific question as to the desirability of forming a class in hand binding in a public evening school. The results, considered in relation to the other data of the investigation, show concretely how baffling is the problem of industrial education of girls in a trade like bookbinding.

The immediate cause of the inquiry was a request for supplies for a class in bookbinding to be carried on in connection with art work in leather in an evening high school. Behind this request, however, was the fundamental question of whether or not an evening class would be of practical service in equipping women for any branch of the bookbinding trade, or in increasing the efficiency of those already employed in it. This question was discussed with art binders, including a woman, who manages her own bindery and teaches the craft, with owners and superintendents of edition

binderies, pamphlet and magazine binderies, and with officers of the bookbinders' union. Not one believed that the plan was feasible or desirable. Their comments will show their reasons.

The superintendent of a large edition bindery thought that, at a comparatively small expense, it might be possible to equip a room in a school building with cutting machine and wire-stitching machine, and girls could then be taught to handle sheets for pamphlets and to paste on the covers. A printer might give this practice shop the contract for binding a magazine, but "the trade" would probably object. A large plant might be developed if the department of education would have its books bound in this classroom. It would be difficult to get employers to co-operate as they do in some countries, because business men here are too much interested in "the dollar mark" and in immediate profit. But even if all these difficulties were removed, he believed that a more serious objection would remain; that after the girls were trained there would not be enough openings for them in the trade. In his opinion, the demand for women's labor in this industry is less now than the supply.

Another summed up his objections tersely by saying that in edition binding the hand work done by women is so simple that there is nothing to learn, while the machine work would not be practicable in a school. In "extra" or art binding the union will not permit women to do anything

but fold or sew. Equally final and even more brief, was the statement of a superintendent of a magazine bindery, that all the work done by women in a magazine bindery is unskilled labor. "There is nothing to teach." "The only way you can teach a person a trade," said another, "is to put her in a workroom."

A member of a firm which has departments for edition binding and for pamphlet and magazine work, considers that school training in bookbinding is not practicable for girls because their work in the trade requires mere manual dexterity and because the demand for them is decreasing as machinery develops.

"Even if you had the machines," said another, "it wouldn't really be the trade." He did not think that it was necessary or practicable to teach the trade in a school, but he believed that the schools could fill a need by giving a more thorough general training in reading and writing. Bindery girls need this knowledge to enable them to put together the pages of books properly.

It was not machine binding, however, but hand binding which was to be introduced into the proposed class in evening school, and although only 2 per cent of the bindery women of New York are employed in this branch of the trade, it had seemed, at first glance, more feasible to train women for hand work of this sort than for machine binding. But inquiry among men and women familiar with conditions in hand binderies brought replies quite

as discouraging as those in regard to the large machine binderies.

One woman, who manages an art bindery, expressed the opinion that women would do well to learn more about the processes which they are now permitted to carry on in binderies, such as sewing, pasting, and mending. She believed that mending books might in time offer a field for women's work, especially if this training were part of the equipment of librarians. She pointed out that accurate judgment is required in sewing, pasting, and other processes in commercial hand binderies. Women must know what kind of sewing is needed for each book, taking into consideration the thickness of the paper, the size of the book, and the character of the binding. For this they must be taught how to think. They cannot merely pick up the knowledge through casual work in a shop. She did not favor, however, an evening school class for bookbinders. To teach the artistic features of the trade would be useless, because women are not permitted to do this work. To teach the processes now recognized as women's work is not desirable, because of the very limited demand for women in hand binderies.

A member of a firm whose craftsmanlike work has won a well-deserved and wide reputation, pointed out that certain conditions affecting the trade as a whole must be considered in relation to this question. Actually fewer books are being bound by art or job binders in New York today

than fifteen years ago. Binders are taxed for their imported raw materials, such as leather and paper, while many bound books come in free. Publishers in the United States are sending some books abroad to be bound. As the finest class of work has been taken away from the commercial binders here, they have lost efficiency through lack of practice, and are turning out a grade of work lower than their potential abilities might justify. For skilled workmanship in the men's department, New York binderies depend more and more upon foreign-born workers, who have learned their trade before they came to the United States. Practically no apprentices are now being trained here. One cause of this is that our apprenticeship law is too loose to hold a boy for a sufficiently long period to make his training profitable to the employer.

Yet in spite of the need for skilled workers, this man did not believe that an evening class for women would be desirable. It might be well to teach women to sew better, or paste better, but, on the whole, he thought that this trade was not one which offered good opportunities for women at present. They would not be allowed to touch any processes in commercial hand binderies, except those they are now doing, and these are too limited to justify trade classes in public schools. If women are to succeed at all in bookbinding, they must look forward to owning their own shops. Otherwise those who make any effort to appro-

priate men's tasks will come into conflict with the men's trade union. He pointed out that the first question to be considered was the attitude of the trade union regarding such classes. They would have the power to put obstacles in the way, and their attitude on the question of women's work would demand careful consideration.

The president of the International Brotherhood of Bookbinders and the president and the secretary of the women's Local 43 defined for us the trade union attitude toward industrial education. The fundamental question which the trade unionist asks is, what effect will a trade school have upon wages? If a trade class results in turning out workers whose position in the labor market makes more difficult the trade union effort to maintain a standard wage, then organized labor opposes it. This is the ground of their opposition to preliminary training which tends to make a class in school the substitute for apprenticeship. But, knowing the workmen's handicap through lack of opportunity to practice the whole trade, the union strongly favors plans for classes which give supplementary technical education* to workers already employed in the trade.

* "Men cannot know too much about the means by which they make a living. And it is well that they should learn all there is to know," said ex-President Prescott of the International Typographical Union in an address before the Brotherhood of Bookbinders at their annual convention in 1908. He had described the typographical union's educational scheme, correspondence courses for printers, and said that it was "in part an effort to save that trade from the blight that has settled on bookbinding in some localities." "In the bookbinding trade," he said, "we see the deplorable effects of specializa-

These officers of the bookbinders' union said that they would oppose a class in bookbinding for girls in public evening schools for two reasons: first, because they would fear that the organization of such classes would tend to turn workers into the shops in too large numbers; and second, because they considered that specific conditions in the trade made it undesirable to train women. Rapid changes in machinery are a menace to women's work. The women's department is minutely subdivided so that they are specialists in particular processes. The job binderies are so few in number and their work so limited that they are not worth considering as a field for women. As to the relation of men's work to women's work, the trade union officers declared that the Brotherhood demands equal pay for equal work, and that, so long as this principle is followed, they do not object to the employment of women in any processes commonly carried on by men. In southern cities women are employed as forwarders, finishers,

tion. The foreman of one of the best binderies there (Chicago) told me that there were at least eleven sub-divisions of the trade, and that the great majority of men were unable to do anything but their respective specialty. Collectively and individually the bookbinders would be advancing their best interests if they had a better grasp on the trade, were not the doers of one simple process. The monotony incident to such work brings on mental decay. What you can do . . . is problematical, but you should do what you can. There is certainly an opportunity to advance the branches of stamping and finishing. This is where craftsmanship of a high order can be brought to play. And craftsmanship can be taught. If designing were more general among bookbinders the field for their work would expand. There is an immense field in the decorative leather work which might be done in the bindery."—Reported in the *International Bookbinder*, Vol. IX, p. 191 (June, 1908).

or rulers, and in New York some women are doing work commonly done by men and receiving the same wages. Without trade union organization, however, "female labor means cheap labor, and therein lies the danger." Finally, although they agreed that the public evening schools might well be utilized to give supplementary technical education to girls, they were convinced that trade conditions in bookbinding made such a class as had been proposed undesirable.

These statements, made by men and women who know trade conditions so well, and yet view them from different angles, are a practical summary of the problem of industrial education for women in this trade. Their opinions show the complex factors which the schools must consider, and the different points of view which ought to be represented in any effort to solve the problem.

The immediate steps to be taken are more obvious than any ultimate solution. Real success will depend upon the possibility of effective co-operation on the part of workers and employers. The trade union would be a powerful ally in efforts to keep children in school until they are sixteen, for already it excludes younger children from work in union binderies. To exclude these children from all binderies by legislative enactment would be an important step in industrial education. More careful systems of training in the workroom would be an asset for employers as well as a benefit to the workers. Further than that the problem can

be solved only by experiment. Such experimental plans might include opportunities to be offered in evening classes not to practice the trade but to gain instruction in fundamental principles, whether it be the construction of a machine or the treatment of leather. Co-operation of this sort between the schools and the industry might do much to test the best methods of developing efficient workers. Meanwhile, it is well frankly to recognize that extreme specialization, constant standing, prolonged hours of work, irregular employment, and low wages produce inefficiency more rapidly than the schools would be able to train skilled workers.

CHAPTER IX

SUMMARY AND OUTLOOK

THE conditions of women's work in the bookbinding trade fail in many particulars to measure up to the standard which public opinion has begun to demand. About 10 per cent of the women workers are under sixteen. Careful supervision of learners in the workroom is rare. Processes are so subdivided as to deaden mental faculties rather than to encourage growth in intelligence. As yet the subject of industrial education is discussed only with reference to the men in the trade, and little attention is given to the problem in the women's department. Operating complicated machines, repeating one process hour after hour, standing at work all day, carrying loads of heavy paper from one part of the shop to another, stooping frequently to lift the folded sections of books, pressing a foot pedal rapidly and incessantly, or handling the completed volumes to wrap them for shipping,—these are tasks which would inevitably fatigue girls even though the day never lasted longer than eight hours. Yet only a fourth of the women in the shops investigated had as short a working day as eight hours, and 44 per

cent worked longer than forty-eight hours in a week. In fully three-fourths of the binderies the girls worked overtime at some season of the year. More than half of the statements collected regarding this overtime showed an excess above the limit allowed by law. Moreover, flagrant instances are recorded of the employment of women throughout the night.

The average wage reported by the group of girls interviewed by us was $7.22 a week, while the average reported by census enumerators in 1905 was even lower, $6.13. Yet it has been seen that women bookbinders are members of households in which it is difficult to make ends meet, and in which heavy responsibilities fall upon the women wage-earners. Their earnings are reduced still lower by reason of irregular work. Only about a third work in establishments reporting steady employment. Nearly three-fourths of the workers interviewed had frequently lost time in slack seasons. Only one in eight reported no time lost for any cause, while nearly a third reported a loss of one to three months during the year, and more than a fourth lost three months or more. An estimate of the approximate yearly income of bindery women shows that nearly three-fourths receive less than $400 in a year, in spite of their finding employment in other occupations when they have no work in bookbinding. An income of less than $400 a year is distinctly below the generally accepted estimate of $9.00 a week as the minimum

wage on which a woman can support herself in New York City.

Yet this is a composite picture. It shows neither the worst nor the best conditions in the trade. The standards prevailing in the best establishments show that improvement in conditions is an entirely practical possibility already tested. In contrast to the bindery in which hand folders work in a gallery less than six feet from the ceiling and must themselves fetch the sheets from the main workroom below, is the establishment in which women work in comfortable quarters and men or boys carry the sheets of books to their tables. In one bindery the accumulated stock piled high shuts off light and air from the workers, while in another care is taken to keep the stock in a part of the workroom where it will not obstruct ventilation. One employer provides a dressing room, supplied with hot and cold water and large enough for the girls to have space and privacy in which to change their clothing after the day's work. Another fastens a few hooks for hats and coats on the wall in a corner of the workroom, but gives no further thought to the workers' comfort. Similarly, one firm provides chairs of the right height for convenience and comfort, while another carelessly purchases stools without backs or foot-rests.

One employer engages large numbers of very young workers whom he keeps only for a season, while another makes sixteen the minimum age in

the workroom, and employs inexperienced workers not as temporary hands for a rush order but as learners who have a future ahead.

One firm squeezes the wages down to the lowest that workers will accept, while another adopts a definite standard of $5.00 a week for learners with an increase of 50 cents every six months until they become experienced, and thereafter a rate calculated to permit an "average" worker to earn $10 a week. One employer makes every effort to steady the seasons, and, if reduction in the force is inevitable, he arranges a part time schedule or lays the workers off in relays for definite, short periods, thus mitigating to a certain extent the hardships of unemployment. Another takes on new hands for every sudden order with the deliberate intention of dismissing them as soon as the work is finished.

The prolonged working day, which gives the bindery trade so unenviable a reputation, is not by any means a universal practice. It is found chiefly in establishments which specialize in the binding and mailing of magazines. On the other hand, there are magazine binderies which have never found a twenty or twenty-two-hour day necessary. One firm habitually requires overtime work at certain seasons, while another has deliberately tried to avoid overtime and has succeeded in reducing it to a minimum.

The impression made on the reader by this description of the employment of women in bind-

eries must depend on his outlook, and the standards which he has in mind. The diverse points of view from which industrial conditions are observed result in different standards of judgment. Thus the bindery worker, if she read these chapters, will probably draw conclusions according to her own experience. She has doubtless found nine hours a long day, overtime exhausting, and $7.00 a week too low a wage to live upon. She will hope, therefore, to see these conditions changed to meet her own needs. If she is a member of the trade union her standard will be definite—an eight-hour day, extra compensation for overtime, and $10 a week for experienced workers—and she will see in the statement of facts about her trade an added argument for the extension of trade unionism. The employer too will probably base his judgment on his own experience, gauging the facts presented by the conditions prevailing in his establishment. Viewing wages primarily as an item of expense to himself rather than as the source of income to his employes, he will be disposed to be tolerant of conditions as he finds them. General readers will differ in their conclusions as they differ in their knowledge of industry and their ability to read the facts about a trade with full appreciation of their significance in relation to the welfare of the workers. In spite of differences in personal judgment, however, a growing fund of scientific data about industrial conditions throughout the country is making possible the formulation of

practicable standards. Their application to a trade will depend not upon the various conclusions of worker, employer, and the general public, but upon an impersonal, scientifically determined basis of fact.

A notable instance of the use of scientific evidence as a basis for establishing a standard for women's work occurred in 1907, in a case argued before the highest court in the land. A laundry owner in Oregon was convicted of a violation of the state law which prohibits the employment of women more than ten hours a day. He appealed his case to the United States Supreme Court on the ground that such a legal restriction was not in accord with the freedom of contract guaranteed to all citizens by the federal constitution. His argument was met by counsel for the state in a brief based not on a theoretical discussion of the rights of citizens nor on an oratorical appeal on behalf of working women, but on an impressive and scientific collection of the results of the world-wide experience which has led nations to set a legal limit to daily hours of work.*

* In a marginal note to the opinion of the court appears an epitome of the material showing the general trend of this world-wide opinion. After a summary of legislation bearing on the question in this country and abroad, reference was made to "extracts from over ninety reports of committees, bureaus of statistics, commissioners of hygiene, inspectors of factories, both in this country and in Europe, to the effect that long hours of labor are dangerous for women, primarily because of their special physical organization. The matter is discussed in these reports in different aspects, but all agree as to the danger. It would, of course, take too much space to give these reports in detail. Following them are extracts from similar reports discussing the general benefits of short hours from an economic

This array of authorities the court found convincing. The relation to the welfare of the race of legislation enacted to protect the health of women was thus summed up by the court: "That woman's physical structure and the performance of maternal functions place her at a disadvantage in the struggle for subsistence is obvious. This is especially true when the burdens of motherhood are upon her. Even when they are not, by abundant testimony of the medical fraternity, continuance for a long time on her feet at work, repeating this from day to day, tends to injurious effects upon the body, and as healthy mothers are essential to vigorous offspring, the physical well-being of woman becomes an object of public interest and care in order to preserve the strength and vigor of the race." The court held "that woman's physical structure, and the functions she performs in consequence thereof, justify special legislation restricting or qualifying the conditions under which she should be permitted to toil. . . . . We take judicial cognizance of all matters of general knowledge."*

aspect of the question. In many of these reports individual instances are given tending to support the general conclusion. Perhaps the general scope and character of all these reports may be summed up in what an inspector for Hanover says: 'The reasons for the reduction of the working day to ten hours—(a) the physical organization of woman, (b) her maternal functions, (c) the rearing and education of the children, (d) the maintenance of the home—are all so important and so far-reaching that the need for such reduction need hardly be discussed.'" United States Reports, Vol. 208. Cases adjudged in the Supreme Court at October term, 1907, pp. 419–420. New York, The Banks Law Publishing Co., 1908.

* *Ibid.*, pp. 420, 421.

In presenting evidence to the court important use was made of the results of laboratory research into the physical effect of fatigue, as a sound basis upon which to enact legislation. Scientific men in many countries have proved beyond question that getting tired is a physiological process equivalent to taking poison into the system. The poison is eliminated and the tissues restored only by a period of rest. Furthermore, rest must be taken before fatigue has become so great as to result in an exhaustion from which recovery is difficult. The application of these facts to the regulation of the hours of work of women in industry is obvious. The public welfare demands that work shall cease and rest be permitted before the worker becomes exhausted. No enlightened employer of women can fail to welcome the scientific conclusions already reached on this subject, and to take them into consideration in determining the hours of work in his establishment.

That the determination of a definite standard of wages is likely to be increasingly sought from now on is indicated by such state action as the recent passage in Massachusetts of a bill providing for the "voluntary" establishment of minimum wage boards. For this purpose a permanent state commission has been appointed and its duties thus defined in the law:*

"It shall be the duty of the commission to inquire into the wages paid to the female employes in any oc-

* Massachusetts Labor Bulletin, No. 92, p. 58, June, 1912.

cupation in the commonwealth, if the commission has reason to believe that the wages paid to a substantial number of such employes are inadequate to supply the necessary cost of living and to maintain the worker in health."

If the inquiry into any industry should convince the commission that inadequate wages are paid to women, a minimum wage board is to be appointed, whose members shall be representatives of the general public, of employers, and of workers in the occupation in question. This board is to determine the minimum wages to be paid to women in the industry, but its determinations are to be recommendations which employers are not legally bound to accept.

This law is indicative of a growing demand for the betterment of conditions, a demand in which all classes of the population are now joining, however great may be their differences of opinion as to methods of reform. Reports of the meetings of the National Association of Manufacturers show their interest in the prevention and relief of work-accidents, in a comprehensive plan for industrial education, and in an effort to bring "manufacturers in every department of industry to a higher realization of their social responsibility to their employes and the public."* The American Federation of Labor works through its affiliated unions in many trades to prohibit the employment of

* National Association of Manufacturers. Report of Seventeenth Annual Convention, May, 1912.

children under sixteen, to establish an eight-hour day in all trades, and to secure a living wage for every worker. State legislatures are rapidly falling into line in the enactment of laws regarding child labor, the introduction of industrial education in public schools, the regulation of the hours of work of women, compensation for accidents, and the maintenance of sanitary conditions in factories.

The attitude of a group of men and women whose work brings them into close contact with social and industrial conditions throughout the country, is also significant. In June, 1912, at the National Conference of Charities and Correction, the committee on standards of living and labor presented a platform of industrial minimums. This declaration dealt with wages, hours, safety and health, compensation and insurance, housing, and the term of working life. A living wage was the first plank, and it was defined as an amount sufficient "to secure the elements of a normal standard of living, to provide for education and recreation, to care for immature members of the family, to maintain the family during periods of sickness and to permit of reasonable saving for old age."* The platform demanded eight hours as the maximum working day for women and minors in all industries, an uninterrupted period of at least eight hours' night rest for all women workers, and the prohibition of the employment

* *The Survey*, XXVIII: 517 (July 6, 1912).

of children under sixteen years of age in any wage-earning occupation. Another section called for the prohibition of the employment of women in occupations which require constant standing. Of irregular employment, the platform declared that "any industrial occupation subject to rush periods and out-of-work seasons should be considered abnormal and subject to government review and regulation." These provisions were based on the principle that with knowledge of the facts of work and "the recent discoveries of physicians and neurologists, engineers and economists, the public can formulate minimum occupational standards below which, demonstrably, work is prosecuted only at a human deficit."

Within a few weeks after this conference a new political party adopted an industrial platform containing practically the same planks. Thus its members registered their conviction that the time was ripe to make standards like these a party issue with a wide appeal to the whole people.

All these expressions of opinion of manufacturers, workers, and citizens are signs of the times, a promise of better things to come in industry. Following the general statement of principles, however, is the more difficult task of applying these principles in all the various fields of employment into which the world's work is divided. For this application, detailed studies must be made of conditions in each occupation. Reform must necessarily come not in industry as a whole,

but trade by trade, since that is the way economic life is organized. Moreover, each trade has its peculiar problems.

To establish proper standards in the bookbinding trade would require certain definite changes, which may be thus summarized:

Prohibition of the employment of children under sixteen.

Careful supervision of learners to insure thorough training.

Co-operation with the public schools in efforts to supply additional opportunities to those who have left school at the age of sixteen.

Limitation of the hours of work of all women to eight in a day, without permitting overtime.

Provision for a definite rest period of at least eight hours during the night for all women, irrespective of age.

Planning the work so as to obviate the ill effects due to specialized tasks and to guard against the dangers peculiar to the trade.*

Provisions for adequate light, ventilation, and

* By allowing change of occupation and posture, by providing chairs with backs, and, if high, with foot-rests, by employing porters to carry the heavy sheets from one part of the workroom to another, and by so adjusting the height of the work-tables to the height of the chairs as to make it possible for hand workers to sit at work without loss of the speed on which their earnings depend; by covering the stock to prevent accumulation of dust, by so placing the books and paper as not to obstruct ventilation, by sprinkling the floor before sweeping every day, or by using vacuum cleaners, by guarding machines likely to injure the hands or fingers, by doing away with the use of foot pedals, and by requiring that machines be constructed in such a way as to make stooping unnecessary, and to permit the operator to sit at work.

space in the workroom and dressing rooms, and for proper toilet facilities.

Protection against fire assured.

Resolute efforts to prevent unemployment, and to steady the seasons.

Payment of adequate wages, with full recognition of the fact that the public welfare requires a living wage for every worker.

To raise all binderies to the level here indicated will require the co-operation of employers, workers, and the public. That the suggestions are practicable is proved by the fact that almost every one of them has been tried to some degree in at least one bindery in New York. No establishment combines them all. The whole trade cannot be suddenly transformed, but a few important changes which would mark a decided advance should now be made general throughout the trade by means of legislation.

No revolutionary reforms are necessary to make state intervention practicable. To strengthen the present laws regarding women's work in factories in New York, and to enforce them strictly, would markedly improve conditions in the bookbinding trade.

Many persons now believe that the employment of children under sixteen ought to be prohibited in any occupation, and especially in connection with machines, or in lifting or carrying heavy weights. It seems obvious that a child of fourteen or fifteen should not be employed for such

heavy work as that required in binding books. In any case, the present legal provision requiring that no employment certificate shall be issued unless the child "is in sound health and is physically able to perform the work which it intends to do" should be more actively enforced.

The law regarding the hours of work of women ought to be amended for the benefit not only of bindery women but of all women at work in factories. Night work should be prohibited in order to assure an adequate rest period in every twenty-four hours, and to make possible the strict enforcement of the fifty-four-hour law. The exception to the nine-hour law permitting a maximum working day of ten hours should be repealed. Prosecutions should be in a reasonable ratio to the number of violations, in order to prove to employers that the law is alive. Public opinion should express itself strongly enough to reach the magistrates' courts, in order that the results of convictions may not be nullified by an unwise use of the suspended sentence.

A sufficient number of medical inspectors should be appointed to begin the collection of data on which to base extensive legislation for the protection of the health of working women. Insufficient ventilation, dusty floors, dusty stock, and all other unwholesome workroom conditions should be corrected by definite laws scientifically determined, and not weakened, as at present, by

provisions giving inspectors discretionary power in such vital decisions.

Legislation, however, is not sufficient without provision for inspection of workrooms and strict enforcement of law. The state labor department, charged with this task of enforcement, must be well organized and supplied with an adequate number of carefully chosen inspectors. The force of women inspectors should be increased especially to look after the welfare of women workers. Undoubtedly they could secure from women employes evidence of violation of the laws more readily than is possible for men inspectors. On the efficiency of the labor department depends the success of the state's effort to protect the health of women workers.

The chief task is to bring home the sense of responsibility to those who have the power to determine conditions. The fact that more than half the bindery workers in New York City are employed in less than 10 per cent of the binderies indicates the power of a few employers and their responsibility for the welfare of women in the trade. It is in the large binderies, however, that members of the firm who have the power to make improvements have the least knowledge of the conditions of employment in their establishments. They appoint a superintendent whom they hold responsible for two main results,—economy in running his department and satisfactory workmanship. An investigator in search of facts about wages, hours, and

seasons soon learns to seek out the superintendent or the foreman rather than the head of the firm, whose knowledge of these vital facts is likely to be very hazy. No marked change in conditions will be possible until the men at the top require superintendents to look after the health and comfort of their employes, and to pay them decent wages. If the small group of important bookbinding firms of New York would positively adopt this practice, they would benefit at once more than half the workers in the trade. They would also set an example which would have its influence on other establishments.

But a firm and its superintendent cannot meet the problems single-handed. In regulating labor conditions they are dealing with vital human issues, which cannot be determined by hard-and-fast methods. Good team work depends upon a spirit of fellowship. The worker's loyalty to the firm and his interest in good workmanship can be secured only if it be possible for employer and employe to meet in a democratic way for discussion of conditions which cannot be wisely determined if the point of view of either be disregarded. As conditions grow more complex this exchange of ideas also grows more complicated. The trade union has developed to give organized expression to the interests of employes. It gives the workers who are active in it a broader view of trade conditions than their personal experience alone could afford. It is a means of securing

the adoption by many firms of the standards accepted by a few.

Both employers and workmen, however, are at the service of the man who gives them orders, whether he be a private customer, a printer, or a publisher. The unreasonable demands of these customers are too often responsible for deplorable conditions of employment. Overtime work and slack season are both traceable to the publisher. When this responsibility is clearly recognized, it will be reasonable to expect publishers to take effective action to meet some of the problems of bindery work. Through books and articles on industrial topics, publishers of books and editors of magazines are trying to improve industrial conditions. To apply the teaching of these books and articles to the binderies where they are bound would be a practical demonstration of great value.

But employer, worker, and customer are not the only persons responsible. While conditions in the best binderies in New York show the practicability of reasonable standards, the contrasts cited in other binderies indicate quite as clearly the danger of leaving standard-making to the individual employer. Enlightened employers will keep ahead of community action, but the community must see to it that none shall fall below the minimum conditions required for the health of the workers.

Furthermore, the interest of the community should make possible a just balance between the

demands of worker and employer. The worker aims to secure higher wages to make possible a better standard of living. The employer is anxious to keep down expenses. The public interest would combine and balance these two views, pointing out that production cheapened at the expense of decent living conditions for the workers in reality costs too much. Without such a balance as the community alone can give, there is too often blind conflict of interests instead of a just and reasonable adoption of proper standards. Public interest is the vital factor needed to focus attention on conditions of employment and to establish throughout the trade the standards which are essential to the health and happiness of thousands of working girls. The task is large and complex, but it is also an encouraging one. It challenges the best thought and effort of reader, writer, binder, printer, publisher, and worker.

APPENDICES

APPENDIX A

OUTLINE OF INVESTIGATION

Three record cards* 5 x 8 inches in size were used in the field work, one for the record of a worker, one for the record of a workshop, and one for the worker's report of conditions in the shop in which she was employed.

The card designed for the record of a worker provided information on three large subjects,—personal history and living conditions, education, and work. The investigation of personal history and living conditions included such facts as:

Nativity, and date of birth.
Relationship to head of family, indicating whether the girl was boarding or living at home.
If living at home,
  nativity of father and mother, and the dates when they came to New York City;
  number and ages of children at home;
  other persons living with family;
  other wage-earners in family, their occupations and weekly earnings;
  condition of apartment, number of rooms, and rent.
If boarding, where and at what cost.
Disposition of earnings, amount given to home, weekly carfare, and yearly savings.
Membership in organizations,—trade union, church, and club.

* See facsimiles of card records, pp. 245 to 248.

The information sought regarding the worker's schooling included:

Last day school attended, place, date of leaving, and grade reached.

Trade or technical school attended, courses taken, and dates of attendance. This was interpreted broadly to include any supplementary education, such as courses in public evening schools, or in business schools.

The investigation of the girl's work history included the following data:

Age at beginning work.

Weeks out of work in the past year, and the reasons for this loss of time.

Comparison of regularity of employment in the past twelve months and in the preceding year.

Training received in a bindery, by whom given, kind of work assigned, and length of time required.

Trade career, with a record of each position in chronological order, stating dates employed, time held, name and address of firm, trade, kind of work done by the girl interviewed, weekly wages, how the position was found, reason for leaving, and the time idle after leaving.

More detailed information was then secured regarding conditions in binderies in which the worker had been employed recently enough to insure accuracy. This material, recorded on a card to be filed under the firm name, afforded a valuable basis for the investigation of establishments. The data gathered on this card included, besides the name and address of the firm:

Name and address of the worker and the dates of her employment in this bindery.

Kind of work done by her.
Posture at work in these various occupations.
Weekly wages.
Fines imposed or any charges made for supplies.
Weeks out of work in past year, or during the time of employment here, if it had been less than a year.
Hours of labor, including time of beginning work in the morning, time of ending work in the evening, length of noon recess, Saturday working hours, and total hours of labor daily and weekly.
Overtime, with full information regarding number of evenings of overtime in a week, closing hour, time allowed for supper, total daily and weekly hours inclusive of overtime, rate of pay for extra work, and the season of the year when the hours of labor are thus prolonged.
Home work,* if any, kind, hours spent on it and earnings.
Workroom conditions, lighting, lunch-room privileges, kind of dressing room provided, and cleanliness of toilets.

In interviewing an employer the same kind of information was sought, but covering the whole establishment rather than the conditions that affect a single worker. The information asked of employers was as follows:

Kind of work done by women, with a description of the nature of the processes, posture required of the worker, and the qualities needed to make her successful, whether neatness, strength, experience, speed or skill.
General range of weekly wages for each process, and whether calculated according to piece or time. The tendency here was to state the best possible wages for each class of work.

*These card records were all designed for investigation of other trades as well as bookbinding. As a matter of fact, home work given out by binderies is very rare.

Total normal force of women employed, and minimum age.
Employer's opinion of the desirability of trade school training for this work.
Seasons, including time of employment of the maximum force of women and the usual number employed during that season; time of employment of minimum force and the number at work then.
Hours of labor, in detail, normally and when working overtime.
Home work, if any; number of workers and kind, whether families, contractors, or institutions.
Workroom conditions, lighting, ventilation, space for workers and cleanliness.

The following record of one of the girls interviewed will best illustrate the sort of information which we were seeking and the method of securing it. She was employed in a bindery in which conditions were unusually good.

We shall call her Mary Brown and give her address as 142 Greenwich Avenue, New York, third floor, back, south. An investigator visited her home one afternoon and talked with her grandmother and her sister, who was also a worker in a bindery. In the evening the visitor returned and talked with the girl herself. This gave an opportunity to check and verify the statements made in the earlier interview. The girl had left the fifth grade of a public school in 1905, three years before she would have graduated. She had been enrolled in a public evening school in two successive terms, once in the "regular course," and once in a dressmaking class, but she did not stay through the term in either class. She went to work at the age of fourteen, working a year as cash girl in a department store, first receiving a weekly wage of $3.00 and later $3.50. Her older sister who had worked in

the same store found the "job" for her. Mary left because there was "no chance to advance."

A friend found her work in October, 1906, in the Western Bindery, where large editions of books were bound. As a learner, she folded sheets by hand and emptied boxes. The other girls showed her how to do the work. There was no definite time of learning. In three and a half years, however, she had had only an occasional opportunity to try to operate a machine, and her weekly earnings had been increased only from $3.50 to $5.50. Her employment had been steady during the past twelve months. In the preceding year she had been without work or wages two weeks when the firm had moved.

Her grandmother was the head of the household. The mother was dead, and the father had deserted his family. Every member of the family had been born in New York. There were five girls at home, ranging in age from twelve to twenty-two years. The other wage-earners were three sisters. One was a learner in a bindery, earning $3.50 a week. Another worked in a hotel laundry, earning $7.00 a week. The third was out of work at the date of the visit. She also had been working in a hotel laundry but the steam made her ill. The combined earnings of the three girls at work were $16 a week. An uncle sent them $10 a month. The grandmother, although nearly blind, did the housework, and managed to make ends meet. The six members of the family lived in four rooms in a tenement built since the New York housing law has demanded a certain minimum of light and air.

Mary gave all her earnings to her grandmother, who returned to her small sums needed for clothes and incidental expenses. She walked to work and carried her lunch, so spent no money for carfare or lunches. She was a member of the Roman Catholic Church. She belonged to no club, nor had she joined the union in the bookbinding trade. Her name had been given to the investigator by another girl employed in the Western Bindery. In the same visits, a similar record

was secured of the trade history of Mary's younger sister who was a learner in the bookbinding trade.

The facts which Mary gave about the Western Bindery were recorded on another card and filed under the name of the bindery. Her chief work was to empty the boxes into which the folded sheets were dropped by the machine. Frequent stooping was necessary and the work was very tiring. She had been fined for being late but was "only scolded," not fined, for spoiling sheets. Her work had been steady. Her working hours were from 8 a.m. to 4:30 p.m., with a half hour at noon, eight hours daily, forty-eight weekly. In summer she worked from 8 a.m. to 5:20 p.m., in order to stop work on Saturday at twelve noon. In busy season she had worked overtime once a week only, and then not later than 7 o'clock, a ten-and-a-half-hour day. Some of the older girls stayed two evenings a week. These hours represented unusually good conditions. She had never taken any work home. There was no lunch room. The girls ate their lunches in the workroom, and made tea on a gas stove in the dressing room.

A month later the investigator visited the bindery and asked questions to verify and supplement the information given by this worker, concerning the kind of work done by women, weekly wages, training of learners, desirability of trade school training, methods of securing workers, seasons of employment, hours of work, overtime, home work, and the conditions in the workroom. Mary was at work in the bindery at the time of the visit, and her statements about processes of work were found to be correct.

1. Worker's Record

NAME	ADDRESS		TRADE
Brown, Mary	142 Greenwich Avenue	3, back, FLOOR 80.	Bookbinding

SCHOOL: NY PS 49 | 6/05 | 5B | TRADE or TECHNICAL SCHOOL: Even'g PS 45, Regular course PS 45, Dressmak'g | 1907-1908 | Did not stay thru either course

Place | No. | Date of leaving | Grade | Name of school | Dept. | Date admission: leaving | Certificate | Remarks

TRAINING IN WORKROOM: "Girls show you". Handfolding, empty boxes. Indefinite. Has not yet been given machine regularly.

By whom given | Kind of work | Length of training | Remarks

RELATIONSHIP TO HEAD OF FAMILY: Granddaughter NATIVITY: U.S. 10/-1891 14 REFERENCE: Katie Martin

Date of birth | Age at beginning work

REGULARITY OF WORK: None | None | None | None | None | None | None

Time idle in last 12 mos. due to slack season | Change of positions | Vacation with pay: without pay | Illness | Other causes | Total time lost

COMPARISON WITH PRECEDING YEAR: Lost 2 weeks when firm moved, cannot afford vacations.

POSITIONS

NO.	DATE EMPLOYED	TIME EMPLOYED YRS.	MOS.	NAME OF FIRM	ADDRESS	TRADE	KIND OF WORK	WEEKLY WAGES TIME	WEEKLY WAGES PIECE	HOW FOUND	TIME IDLE AFTER LEAVING	REASON FOR LEAVING
	10/-05 TO 10/-06	1		Smith Bros.	W.23rd St.	Department Store	Cash girl	$ 3-	$ 3½	Sister	0	No chance to advance
	10/-06			Western Bindery	14 Bethune Street	Edition Bindery	Learner	$ 3½-	5½	Friend		
	.....											
	.....											
	.....											

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2. Worker's Record (Reverse)

FAMILY. F US M US (NATIONALITY)	Y(1) N (F & M LIVING)	F Life M Life (YEAR OF COMING TO NEW YORK CITY)	5;Girls-18,22,20,16,12. (NUMBER & AGES OF CHILDREN AT HOME)	Grandmother (OTHER PERSONS LIVING WITH FAMILY)	
OTHER WAGE-EARNERS IN FAMILY	3 sisters. (PERSONS)	Bookbinder,Laundress, 1 out of work.(2) (OCCUPATIONS)	$3.50, $7.00, - (WEEKLY EARNINGS)		
WORKER'S HOME	Yes (WITH FAMILY)	4 (NUMBER OF ROOMS)	$17 (RENT)	6 (TOTAL PERSONS)	Large tenement,halls fairly clean. (HOUSE CONDITIONS)
Disorderly (CONDITION OF APARTMENT)					
IF BOARDING	- (FURN. RM.; HOME; TENEMENT; OTHER)	-	-	-	- (WEEKLY COST OF ROOM; LUNCH; OTHER MEALS)
- (DEPENDENT ON OWN EARNINGS)					
DISPOSITION OF EARNINGS	All (MONEY GIVEN WEEKLY TO HOME)	None (WEEKLY CARFARE)	None (MONEY SAVED YEARLY)	Walks to work. Takes lunch from home. (REMARKS)	
CHURCH TRADE UNION CLUB. CLASS MEMBERSHIP	Roman Catholic Church, no club or trade union.			DUES -	
APPLICATIONS AT A E B	None (DATES)	- (KINDS OF WORK)	- (PLACEMENTS)	- (REMARKS)	

REMARKS (1) Grandmother says that the girl's father is worthless and that they will not have him live there with them. Mrs. Brown's brother, who lives in Philadelphia, sends them $10. a month. All the girls are insured and the grandmother says that she is able to manage with their wages.

(2) Occupations:- Rose, the oldest daughter works in laundry of Hotel Imperial, $7 a week. Annie, the second daughter formerly worked in same place, $7 a week. Was taken ill from working in steam. Has since been employed in a pin ticket place. Laid off slack. Is now out of work. Gave her card to the Alliance Employment Bureau
Mary,16, a bookbinder. See her record card.
Frances, in school. Helps with housework.
Grandmother, very old and feeble, has recently had a bad fall. She manages the household. The mother died 4 years ago.

DATE	5/8/10- afternoon	INVESTIGATOR M. A. Jones	SOURCE OF INFORMATION Sister in home.
	5/8/10- evening	M. A. Jones	Girl in home.

3. Worker's Report of Bindery

NAME OF FIRM	ADDRESS	TRADE
Western Bindery	14 Bethune Street	Bookbinding-edition

NAME OF WORKER Brown, Mary ADDRESS 142 Greenwich Avenue DATE OF ENTERING; LEAVING 10/-06 -

KIND OF WORK Learner, hand-folding, emptying boxes,(Tries point folding machine occasionally)

POSITION AT WORK Stands and stoops. Gets very tired, work very heavy.

WEEKLY WAGES FIRST IN THIS ESTABLISHMENT: TIME $3.50 PIECE - ; LAST IN THIS ESTABLISHMENT: TIME - PIECE - ; IF STILL HERE, WAGES IN LAST 4 WEEKS: $5.50 a week

FINES Yes (LATENESS) No fines but "scolded" (SPOILED WORK) - (OTHER) CHARGES FOR SUPPLIES None

SEASONAL WORK	TIME IDLE IN LAST 12 MOS. BECAUSE OF SLACK SEASON	VACATION WITH PAY: WITHOUT PAY	ILLNESS	OTHER CAUSES	TIME IN OTHER WORK	TOTAL TIME LOST
None	None	None	None	None	None	None

HOURS OF LABOR NORMAL: BEGIN 8 A.M. END 4:30 P.M.; SATURDAY 4:30 P.M.; NOON ½ HR.; TOTAL DAILY 8 HRS.; TOTAL WEEKLY 48 HRS. REMARKS (NOTE VARIATIONS FROM NORMAL SCHEDULE) Summer 8 to 5:20, Sat. 12

OVERTIME NUMBER OF TIMES PER WEEK 1; CLOSING HR. 7 P.M.; SATURDAY 4:30 P.M.; SUPPER 0 MIN.; TOTAL DAILY 10½ HRS.; TOTAL WEEKLY 50½ HRS.; SEASON OF OVERTIME IN YEAR Autumn; RATE OF PAY Time

HOME WORK KIND None HOURS - EARNINGS -

WORK ROOM	LUNCH ROOM PRIVILEGES	DRESSING ROOM	TOILETS	LIGHTING
Eats lunch in workroom, makes tea.	Yes	Clean	"Very lightsome"	

DATE 5/8/10 INVESTIGATOR M. A. Jones SOURCE OF INFORMATION Girl in home.

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4. Investigator's Report of Bindery

NAME OF FIRM	ADDRESS	TRADE
Western Bindery	14 Bethune Street 8th floor	Bookbinding-edition

KIND OF WORK FOR WOMEN	WEEKLY WAGES Range*	TIME	PIECE	REQUIREMENTS NEATNESS	STRENGTH	EXPERIENCE	SPEED	SKILL	POSITION AT WORK SIT	STAND	REMARKS
1 Empty boxes, etc.	4	✓		✓	✓					✓	"Help other girls"
2 LEARNERS Gathering & collat'g	10-15		✓	✓		✓	✓	✓	✓	✓	No gathering machine
3 Folding (machine)	9-12		✓			✓	✓	✓	✓		Pt. Drop roll, Automatic
4 Pasting (hand)	10-15		✓	✓		✓	✓	✓	✓		1 machine on trial
5 Sewing (machine)	4-11	✓	✓	✓		✓	✓	✓	✓		8 employed
6 Gold-laying	10-11	✓		✓		✓		✓	✓		Union members-2 women
7 Wrapping & mailing	6- 8	✓		✓		✓				✓	2-3 employed

WOMEN WORKERS: NUMBER EMPLOYED 30 — AGES MIN. 14 — ANY NATIONALITY REFUSED: None — WORKERS MOST IN DEMAND: Experienced — WORKERS NEEDED NOW: None

DESIRABILITY OF TRADE SCHOOL TRAINING: Desirable — KIND OF TRAINING: Might be trained in machine work. — PLACEMENTS BY A. E. B. (KIND OF WORK): None

SEASONAL WORK: TIME OF MAX EMPLOYMENT: Autumn — AVERAGE FORCE OF WOMEN: 30 — TIME OF MIN. EMPLOYMENT: Summer usually — AVERAGE FORCE OF WOMEN: None laid off

HOURS OF LABOR: NORMAL BEGIN: 8 A.M. — END: 4:30 P.M. — SATURDAY: 4:30 P.M. — NOON: ½ HR. — TOTAL DAILY: 8 HRS. — TOTAL WEEKLY: 48 HRS. — REMARKS (NOTE VARIATION FROM NORMAL SCHEDULE): Summer 8 to 5:20, Sat. 12

OVERTIME: NUMBER OF TIMES PER WEEK: 2 — CLOSING HR: 7 P.M. — SATURDAY: 4:30 P.M. — SUPPER: 0 MIN. — TOTAL DAILY: 10½ HRS. — TOTAL WEEKLY: 53 HRS. — NUMBER WEEKS OVERTIME IN YEAR: 4-6 in autumn — RATE OF PAY: Time

HOME WORK: IF ANY, EXTENT: None

WORKROOM: LIGHTING: Good — VENTILATION: Good — SPACE: Adequate — CONTRACTORS: CLEANLINESS: Clean — DUST: None visible — INSTITUTIONS. REMARKS: New building

DATE 6/12/10 — INVESTIGATOR M.A. Jones — SOURCE OF INFORMATION Forewoman

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* Indicates general range of piece work earnings

APPENDIX B

SUPPLEMENTARY STATISTICS

The following statistics were secured from card records filled by working girls attending public evening schools in New York City in the winter of 1910–11. The figures show certain facts about the schooling of women employed in bookbinding compared with those at work in all trades. A total of 4,519 records of women in all trades were tabulated, but the number varies in different tables. The largest number, 3,917, appears in Table B; on this point, "last day school attended," 602 did not supply information. In compiling all the other tables, we omitted 827 records of girls attending two schools from which data on these points were insufficient for tabulation. Of the remaining 3,692 records tabulated, 842 did not supply information for Table C, and 603 did not supply information for Table D. Among the 3,692 women, 66 of the 2,094 whose last attendance was in New York public day schools, and who were, therefore, considered in Table E, did not supply information on this point. In considering the rate of progress in school, the tabulation was limited to a group of 1,562 who had attended New York public schools only. Of these, 145 did not supply information for Table G, and 163 for Table H.

TABLE A.—SCHOOLS PREVIOUSLY ATTENDED BY 142 WOMEN EMPLOYED IN BOOKBINDING AND BY 3,692 WOMEN IN ALL TRADES ATTENDING PUBLIC EVENING SCHOOLS, NEW YORK CITY, 1910–1911[a]

Schools Previously Attended	Women in Bookbinding		Women in all Trades	
	Number	*Per Cent*	*Number*	*Per Cent*
New York City public schools	92	65	2,184	59
Private, parochial, or corporate schools in New York City	64	45	630	17
Schools in the United States, outside New York City	4	3	180	5
Schools in foreign countries	4	3	845	23
None	..	..	34	1

[a] Of the 144 women employed in bookbinding, 2 did not supply information on this point. As some of these women had attended schools of two or more different types the figures in the table add to totals larger than the number of women from whom information was secured.

TABLE B.—LAST DAY SCHOOL ATTENDED BY WOMEN EMPLOYED IN BOOKBINDING AND BY WOMEN IN ALL TRADES ATTENDING PUBLIC EVENING SCHOOLS, NEW YORK CITY, 1910–1911[a]

Last Day School Attended	Women in Bookbinding		Women in all Trades	
	Number	*Per Cent*	*Number*[b]	*Per Cent*
New York City public schools	85	62	2,213	56
Private, parochial, or corporate schools in New York City	47	34	476	12
Schools in the United States, outside New York City	1	1	103	3
Schools in foreign countries	4	3	937	24
None	..	..	188	5
Total	137	100	3,917	100

[a] Of 144 women employed in bookbinding, 7 did not supply information on this point.

[b] The inconsistencies between the figures of this column and the figures of the corresponding column of table A, are due to a difference in the number of women who supplied information. See introductory note to Appendix B.

TABLE C.—YEARS OF ATTENDANCE AT DAY SCHOOL OF WOMEN EMPLOYED IN BOOKBINDING AND OF WOMEN IN ALL TRADES ATTENDING PUBLIC EVENING SCHOOLS, NEW YORK CITY, 1910–1911[a]

Years in School	Women in Bookbinding		Women in all Trades	
	Number	*Per Cent*	*Number*	*Per Cent*
Less than 5 years	1	1	212	7
5 years and less than 6 years	4	3	135	5
6 years and less than 7 years	7	6	270	9
7 years and less than 8 years	25	20	585	21
8 years and less than 9 years	56	45	958	34
9 years and less than 10 years	24	19	446	16
10 years or more	8	6	210	7
None	..	..	34	1
Total	125	100	2,850	100

[a] Of 144 women employed in bookbinding, 19 did not supply information on this point.

TABLE D.—AGE AT LEAVING DAY SCHOOL OF WOMEN EMPLOYED IN BOOKBINDING AND OF WOMEN IN ALL TRADES ATTENDING PUBLIC EVENING SCHOOLS, NEW YORK CITY, 1910–1911[a]

Age at Leaving School	Women in Bookbinding		Women in all Trades	
	Number	*Per Cent*	*Number*	*Per Cent*
Under 14 years	14	11	517	17
14 years and under 15 years	68	53	1,498	48
15 years and under 16 years	33	25	708	23
16 years and under 17 years	10	8	244	8
17 years and under 18 years	2	2	52	2
18 years or over	1	1	36	1
Never attended school	..	..	34	1
Total	128	100	3,089	100

[a] Of 144 women employed in bookbinding, 16 did not supply information on this point.

TABLE E.—GRADE AT LEAVING NEW YORK PUBLIC DAY SCHOOLS OF WOMEN EMPLOYED IN BOOKBINDING AND OF WOMEN IN ALL TRADES ATTENDING PUBLIC EVENING SCHOOLS, NEW YORK CITY, 1910–1911[a]

Grade at Leaving School	Women in Bookbinding		Women in all Trades	
	Number	*Per Cent*	*Number*	*Per Cent*
Below the fifth grade	3	3	78	4
Fifth	2	2	197	10
Sixth	14	18	393	19
Seventh	21	26	527	26
Eighth	18	22	197	10
Graduate of elementary school	18	22	499	24
High school (not graduates)	6	7	133	7
High school graduates	..	..	4	..
Total	82	100	2,028	100

[a] Of 85 women employed in bookbinding, whose last attendance was in New York public day schools, 3 did not supply information on this point.

TABLE F.—PREVIOUS ATTENDANCE AT NEW YORK PUBLIC DAY SCHOOLS ONLY, AND AT OTHER SCHOOLS OF WOMEN EMPLOYED IN BOOKBINDING AND OF WOMEN IN ALL TRADES, ATTENDING PUBLIC EVENING SCHOOLS, NEW YORK CITY, 1910–1911[a]

Attendance at	Women in Bookbinding		Women in all Trades	
	Number	*Per Cent*	*Number*	*Per Cent*
New York public schools only	66	46	1,562	42
Other schools	76	54	2,130	58
Total	142	100	3,692	100

[a] Of 144 women employed in bookbinding, 2 did not supply information on this point.

TABLE G.—YEARS OF ATTENDANCE IN PUBLIC DAY SCHOOLS OF WOMEN EMPLOYED IN BOOKBINDING AND OF WOMEN IN ALL TRADES, ATTENDING PUBLIC EVENING SCHOOLS, NEW YORK CITY, 1910–1911[a]

Years of Attendance in New York Public Day Schools	Women in Bookbinding		Women in all Trades	
	Number	*Per Cent*	*Number*	*Per Cent*
Less than 6 years	..	..	89	6
6 years and less than 7 years	4	7	137	10
7 years and less than 8 years	13	22	319	22
8 years and less than 9 years	26	45	578	41
9 years or over	15	26	294	21
Total	58	100	1,417	100

[a]This table relates to women who attended New York City public schools only. Of 66 women employed in bookbinding, who attended New York public schools only, 8 did not supply information on this point.

TABLE H.—PROGRESS IN PUBLIC DAY SCHOOLS OF WOMEN EMPLOYED IN BOOKBINDING AND OF WOMEN IN ALL TRADES, ATTENDING PUBLIC EVENING SCHOOLS, NEW YORK CITY, 1910–1911[a]

Progress	Women in Bookbinding		Women in all Trades	
	Number	*Per Cent*	*Number*	*Per Cent*
Rapid	5	9	206	15
Normal	12	21	369	26
Slow	40	70	824	59
Total	57	100	1,399	100

[a]This table relates to women who attended New York City public schools only. Of 66 women employed in bookbinding, who attended New York City public schools only, 9 did not supply information on this point. The rate of progress was measured by the number of years required to reach the grade in which the pupil was enrolled at the time of leaving school, allowing one year to each grade. For example, a pupil who had attended school six years was rated as "normal" if she had reached grade 6 B or 7 A, "slow" if she were in a lower grade, and "rapid" if she were in a higher grade.

TABLE I.—HOURS AT WHICH WOMEN EMPLOYED IN BOOKBINDING BEGIN WORK[a]

Hour of Beginning Work	Women Beginning Work at Specified Time in					
	Edition and Pamphlet Binderies Employing 50 or more Women		*All Other Binderies*		*All Binderies*	
	Number	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
7:30 and before 8 a. m.	525	17	165	8	690	14
8 and before 8:30 a. m.	2,298	76	1,532	75	3,830	75
8:30 and before 9 a. m.	210	7	303	15	513	10
At 9 a. m. . . .	..	..	35	2	35	1
Total . . .	3,033	100	2,035	100	5,068	100

[a] Of the 5,689 women employed in binderies supplying any information regarding hours, 621 were in establishments which did not state time of beginning work.

TABLE J.—LENGTH OF NOON RECESS OF WOMEN EMPLOYED IN BOOKBINDING[a]

Length of Noon Recess	Women Having Specified Length of Noon Recess in					
	Edition and Pamphlet Binderies Employing 50 or more Women		*All Other Binderies*		*All Binderies*	
	Number	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
30 minutes and less than 45 . . .	2,243	74	1,533	73	3,776	74
45 and less than 60 .	390	13	184	9	574	11
60 minutes. . .	400	13	371	18	771	15
Total . . .	3,033	100	2,088	100	5,121	100

[a] Of the 5,689 women employed in binderies supplying any information regarding hours, 568 were in establishments which did not state length of noon recess.

TABLE K.—HOURS AT WHICH WOMEN EMPLOYED IN BOOKBINDING LEAVE WORK, WHEN NOT WORKING OVERTIME[a]

Hour of Leaving Work	Women Leaving Work at Specified Hours in					
	Edition and Pamphlet Binderies Employing 50 or more Women		*All Other Binderies*		*All Binderies*	
	Number	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
Before 5 p. m. . .	428	14	69	3	497	10
5 p. m. and before 5:30 p. m. . . .	1,625	52	493	24	2,118	41
5:30 p. m. and before 6 p. m. . . .	1,080	34	1,164	57	2,244	43
6 p. m. . . .	..	..	321	16	321	6
Total . . .	3,133	100	2,047	100	5,180	100

[a] Of 5,689 women employed in binderies supplying any information regarding hours, 509 were in establishments which did not state the hour of leaving work.

APPENDIX C

SIXTY-HOUR RESTRICTION ON THE EMPLOYMENT OF WOMEN IN FACTORIES IN NEW YORK STATE HELD TO BE CONSTITUTIONAL*

People *v.* Howe, Court of Special Sessions, Oct. 31, 1906

PER CURIAM.—The defendant pleaded guilty to an information charging him with violation of the provisions of section 77 of the Labor Law in that, during the week between the 24th day of September and the 1st day of October, 1906, in the County of New York, he unlawfully did employ, and permit, and suffer to work in and in connection with a certain factory a certain female, one Mary Seeback, for the period of more than sixty hours in said week. The defendant further pleaded guilty to two other informations charging him with a violation of the provisions of the same law in respect of two other females.

Summary inquiry was had in each of these cases which developed the fact that the factory referred to in the information was a steam laundry, and that each of the females alleged to have been employed illegally was an adult.

Defendant thereupon, through counsel, moved in arrest of judgment on the ground that section 77 of the Labor Law, so far as it attempted to restrict the right to employ female labor in a factory more than 60 hours in a week or the right of females to labor more than 60 hours in any one week is

*New York State Department of Labor, Bulletin No. 31, December, 1906, p. 484.

unconstitutional. He cited Lochner *v.* State of New York, 198 U. S., 45.

This court has already declared that portion of section 77 of the Labor Law which prohibits employment in a factory of any female after 9 o'clock at night and before 6 o'clock in the morning to be unconstitutional, (People *v.* Williams, N. Y. Law Journal, Aug. 10, 1906), and defendant seeks to establish the unconstitutionality of the act in its further restriction of the number of hours a week during which a female may be employed.

The decision in the Williams case rested solely upon the ground that that part of the law there invoked could not be considered as purely a health regulation, and as such within the police power of the state, and, as was decided in the Lochner case, that it was an "unreasonable, unnecessary, and arbitrary intereference with the right of the individual to his personal liberty or to enter into those contracts in relation to labor which may seem to him appropriate or necessary for the support of himself and his family."

There is a distinction between a law which prohibits the employment of a woman for the slightest period of time during certain hours and one which limits the number of hours in a day or a week during which she may be employed at factory work. A law which attempts to limit the number of hours of labor of a woman employed in a factory, may well be a health regulation and a proper legislative exercise of the state's police power. There has been no adjudication of this law by the appellate courts of this state. The courts of last resort in four other states, however, have passed upon this question of the hours of labor of women under statutes and constitutional provisions quite similar to those under consideration. In Massachusetts (Commonwealth *v.* Hamilton Manufacturing Co., 120 Mass., 383); in Nebraska, (Wenhan *v.* State, 91 Northwest Rep., 421); and in Washington, (State of Washington *v.* Buchanan, 29 Wash., Rep., 602), the courts upheld the constitutionality of acts which limited

the number of hours during which women labor in factories in those several states. In Illinois (Richie *v.* People, 155 Ills., 98), the Supreme Court of that state declared a similar act to be unconstitutional. The weight of authority, therefore, seems to be favorable to the constitutionality of a law which limits the number of hours in a day or week that a woman may be employed at work in a factory.

There is nothing in the Lochner case, reported, which indicates the sex of the employe, who it was alleged was required to work more than sixty hours a week. We know that the person in that case was an employe in a bakery or confectionery establishment. Defendant's counsel urges that the decision of the United States Supreme Court in the Lochner case is applicable here. The Lochner case, however, did not turn upon the sex of the person employed, but upon the nature of the employment. The issue directly in point here is that of sex. It is an issue which has not yet been presented to the Supreme Court of the United States, but as has been said, the weight of authority being for the constitutionality of the act in question, this court is constrained to deny, and does deny, the motion in arrest of judgment.

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